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Massachusetts Health Care Cost Trends

Premium Levels and Trends in Private Health Plans: 2007-2009

May 2011

DIVISION OF
Health Care
Finance and Policy

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Executive Summary

Pursuant to the provisions of M.G.L. c. 118G, § 6 1/2, the Massachusetts Division of Health Care Finance and Policy (DHCFP) is required to conduct an annual study of health care cost trends in the Commonwealth, and the factors that contribute to cost growth. This report discusses enrollee demographics in the Massachusetts commercial markets, trends in premiums paid by employers and consumers for health insurance, the medical expenses and retention charges included in those premiums, and the impact of premium trends on the health insurance purchasing decisions of employers and individuals.

Throughout the report, the insurance market sectors are defined as follows: individuals are those who purchase coverage directly; small groups are those with 1 to 50 eligible employees (as defined by Massachusetts Division of Insurance regulation 211 CMR 66.04); mid-size groups are those with 499 or fewer enrolled employees, that do not meet the definition of a small group; and large groups are those with 500 or more enrolled employees. Collectively, individuals and small groups are referred to as the "merged market."

Findings are based primarily on premium, claims, membership, and non-medical expense data provided by the largest health insurance carriers in the Commonwealth from 2007 to 2009.

Overview of the Massachusetts Insurance Market

Since the passage of the Commonwealth's landmark health reform legislation in 2006, the Massachusetts health insurance market has undergone several key regulatory changes. In addition to the expansion of subsidized coverage, the establishment of an individual mandate, and the creation of incentives for employers to offer coverage, the law also combined the individual and small group markets into a single "merged market" to provide greater premium affordability, stability, and product offerings to individuals. The merged market allows individuals to purchase the same range of products available to small groups. Premium rates are based on the projected claims experience of the entire merged market, which consists of more small group members than individual purchasers.

Private Insurance Enrollment

This portion of the analysis explores changes to the number of people covered by private insurance in Massachusetts, enrollment shifts between the various group sizes, and changes in demographic trends for those with private insurance. These trends are important because they impact a carrier's determination of health insurance premium rates.

Key findings include:

- Annual enrollment declined in all fully-insured group sectors (small, mid-size, and large) from 2007 to 2009, but increased in the individual and self-insured market sectors.
- The average size of insured small and mid-size groups (measured as the number of subscribers per employer) decreased from 2008 to 2009, while the average size of large groups and self-insured groups was relatively stable.
- The individual sector was significantly older on average than the group sectors, covering relatively few children aged 0 to 19 and relatively more adults aged 60 to 64, despite the inclusion of Young Adult Plans in the individual sector.

Private Insurance Enrollment

	2007	2008	2009
Individual Pre-Merger Products	35,700	14,238	3,541
Individual Post-Merger Products	12,566	57,091	77,869
Individual Total	48,266	71,329	81,410
Small Group	692,777	668,421	623,344
Mid-Size Group	780,151	759,422	739,524
Large Group	565,845	520,842	485,351
Self Insured	1,978,340	1,984,767	2,044,369
Total	4,065,380	4,004,780	3,973,999

Premium Trends

This section of the analysis highlights the trends in health insurance premium growth in the private market in Massachusetts. Some of the data is presented as *unadjusted* and other data as *adjusted*. *Unadjusted* levels and trends represent exactly what the employer spent on health insurance premiums. In contrast, *adjusted* levels and trends are controlled for certain factors in order to allow for direct comparison across groups and between years. *Adjusted* premium information presented includes only group sectors (small, mid-size, and large), not the individual sector or merged market. Key findings include:

- From 2007 to 2009, private group health insurance premiums in Massachusetts increased roughly 5 to 10 percent annually, when adjusted for benefits. This compares to consumer price index (CPI-U) increases (for all goods and services) averaging 1.7 percent annually over the same time period nationwide and 2.0 percent in the Northeast.

Premium Trend Adjusted for Benefits

	Percent Change	
	2007-2008	2008-2009
Small Group	9.8%	9.5%
Mid-Size Group	6.1%	7.6%
Large Group	6.2%	5.4%

- Smaller groups paid higher premiums from 2007 to 2009 than mid-size and large groups, when adjusted for demographics, geographic area, and benefits. It is important to note that premium increases for specific employers may vary significantly from the average.

Premium Levels Adjusted for All Factors

	Premium PMPM		
	2007	2008	2009
Small Group	$465	$505	$548
Mid-Size Group	$436	$461	$493
Large Group	$422	$447	$470

- In 2009, small groups had the greatest variation in rate increases of any other group sector, reflecting greater premium volatility in this market sector.[1]
- On average, the level of benefits covered by private group health insurance has declined and member cost-sharing has increased.
  - Deductibles and copayments generally increased from 2007 to 2009. For example, in the small group sector, the inpatient copayment in the most popular HMO plan increased from $500 to $1,000.
  - Among small groups, average benefits decreased 3.6 percent from 2007 to 2008 and 6.6 percent from 2008 to 2009.
  - Due primarily to benefit reductions, premium trends unadjusted for benefits and demographics were lower than the trends adjusted for benefits. This was most notable in the small group sector.

Premium Trend Unadjusted

	Percent Change	
	2007-2008	2008-2009
Small Group	5.8%	2.2%
Mid-Size Group	5.2%	5.6%
Large Group	6.1%	4.3%

- Enrollment in the lowest-cost HMO plan and the lowest-cost PPO plan was uniformly low. From 2007 to 2009, enrollment in the lowest-cost HMO and PPO plans combined increased to just two percent in the merged market, and one percent in the mid-size and large group market sectors.

Medical Loss Ratios

This section of the analysis explores the breakdown of private health insurance premiums in Massachusetts between medical and non-medical spending. The medical loss ratio identifies the portion of the premium devoted to actual health care expenses. The remaining portion, called retention, is the portion of the premium used to fund non-medical, administrative expenses and contributions to surplus or profit.

1 Premium growth volatility can be substantial in the small group market due to changes in subscriber demographics (as each subscriber represents a significant percentage of the total group) or changes in the number of enrolled subscribers (as most carriers set premium rates based in part on the size of the group).

Key findings include:

- From 2007 to 2009, the medical loss ratio calculated across all insured market sectors increased from 88 percent to 91 percent.
- Small groups paid a larger per member per month (pmpm) amount towards retention than did large groups. In 2007 and 2008, small groups paid 120 percent of what large groups did on a pmpm basis towards non-medical spending. In 2009, that figure rose to 141 percent.
- Contribution to surplus (for not-for-profit companies) or profit (for "for-profit" companies) accounted for roughly 25 percent of retention charges built into pricing in all insured market sectors in April 2010.

2010 Market Changes

In 2010, material changes occurred in the health insurance markets in Massachusetts and nationwide. Federal health care reform (the Patient Protection and Affordable Care Act or the ACA) was signed into law in 2010, just after the 2007-2009 time period reflected in the data requested for this study. Additionally, Governor Patrick directed the Massachusetts Division of Insurance in 2010 to increase its oversight of the merged market. Emergency regulations were promulgated requiring health insurance carriers to file their proposed rates 30 days prior to their effective date with documentation justifying the necessity of any requested increases. On April 1, 2010, the Commissioner of Insurance disapproved 235 of 274 proposed rate increases. The impacted carriers called for hearings on the disapproved rates and the Division of Insurance and carriers settled at premium levels that saved Massachusetts small group and individual covered persons over $100 million. Finally, state legislation enacted in 2010 (Chapter 288 of the Acts of 2010) implemented additional reforms in the regulation of the merged market. Given the scope of this report's analysis, it was not possible to directly attribute premium levels and trends to any one change in federal or state law.

Preliminary findings on first quarter 2010 premiums and calendar year 2010 medical loss ratios are below. Specifically:

- Quoted rates for small groups rose sharply in the first quarter of 2010. Roughly 15 to 20 percent of members in the small group market renewing in the first quarter received quoted rate increases of 35 percent or more. Over half received a quoted rate increase of 20 percent or more.
- In 2009, carriers incurred claims and administrative expenses for comprehensive major medical products equal to 101.6 percent of premium, equating to a 1.6 percent underwriting loss. In 2010, incurred claims and administrative expenses represented 100.0 percent of premium, or a break-even underwriting result.

- Medical loss ratios across all market segments combined, as reported in carrier financial statements, decreased from 90.5 percent in 2009 to 89.4 percent in 2010. The decrease in medical loss ratio from 2009 to 2010 appears to be the result of a slowing trend in medical expenditures, both locally and nationally. While medical claims expenditures in Massachusetts increased annually between 6.3 percent and 11.7 percent from 2002 to 2009, they increased by just 3.7 percent from 2009 to 2010. However, it is not yet possible to determine if a decline in growth of medical claims expenses may impact total health care spending. Medical claims expenditures reflect carrier payments and do not include cost-sharing amounts, so changes in the rate of increase may be the result of benefit buy-down.

Conclusion

The findings of this analysis indicate that health insurance premium increases in Massachusetts continue to outpace inflation. This trend presents a multitude of challenges to nearly every facet of the Commonwealth's health and economy. If health care costs and health premiums continue to rise faster than wage growth, employees may struggle with increased premium contributions and cost-sharing responsibilities. Furthermore, with ever-higher premiums being quoted by carriers to local businesses, many employers will continue to "buy down" benefits, potentially leaving employees and their families more exposed to cost and less likely to access needed care because of additional copayments, co-insurance, or deductibles. The continued growth in health insurance premiums threatens the welfare of the Massachusetts economy.

Introduction

Pursuant to the provisions of M.G.L. c. 118G, § 6 1/2, the Massachusetts Division of Health Care Finance and Policy (DHCFP) is required to conduct an annual study of health care cost trends in the Commonwealth, and the factors that contribute to cost growth. This report discusses enrollee demographics in the Massachusetts commercial markets, trends in premiums paid by employers and consumers for health insurance, the medical expenses and retention charges included in those premiums, and the impact of premium trends on the health insurance purchasing decisions of employers and individuals.

Findings are based primarily on premium, claims, membership, and non-medical expense data provided by the largest health insurance carriers in the Commonwealth from 2007 to 2009.[2] These carriers represent approximately 95 percent of individuals and employees with fully insured comprehensive coverage written in Massachusetts, including individuals with Young Adult Plans.[3] Preliminary analysis on first quarter 2010 premiums and calendar year 2010 medical loss ratios are also provided. This report focuses mainly on the fully insured market; however, some self-insured enrollment and fee data are reported.

Throughout this report, the insurance market sectors are defined as follows: individuals are those who purchase coverage directly; small groups are those with 1 to 50 eligible employees (as defined by Massachusetts Division of Insurance regulation 211 CMR 66.04); mid-size groups are those with 499 or fewer enrolled employees, not meeting the definition of a small group; and large groups are those with 500 or more enrolled employees. When small, mid-size, and large groups are combined, they are referred to as "group market" sectors. Individuals and small groups are collectively referred to as the "merged market."

2 The analysis in this report relies on premium, claims, and membership data submitted by major Massachusetts health plans. These data were reviewed for reasonableness, but they were not audited. To the extent the data are incomplete or inaccurate, the findings are compromised. When not consistent across years, membership data provided by some carriers were eliminated from the analysis. Participating carriers for most analyses included: Blue Cross and Blue Shield of Massachusetts Inc., Blue Cross and Blue Shield of Massachusetts HMO Blue, Inc., Fallon Community Health Plan, Inc., Fallon Health & Life Assurance Co., Harvard Pilgrim Health Care, Inc., Harvard Pilgrim Insurance Company, Inc., Neighborhood Health Plan, Inc., Tufts Associated Health Maintenance Organization, Inc. (d/b/a/ Tufts Health Plan), Tufts Insurance Co., Unicare Life & Health Insurance Co., and United HealthCare of New England, Inc.

3 For purposes of this report, commercial markets include individual and group insurance, fully-insured and self-insured. Medicare Advantage, Medicare supplement, Medicaid, Commonwealth Care, and non-medical lines of business are excluded.

Overview of the Massachusetts Insurance Market

Since the passage of the Commonwealth's landmark health reform legislation in 2006, the Massachusetts health insurance market has undergone several key regulatory changes. In addition to the expansion of subsidized coverage, the establishment of an individual mandate, and the creation of incentives for employers to offer coverage, the law also combined the individual and small group markets into a single "merged market" to provide greater premium affordability, stability, and product offerings to individual purchasers. Consequently, individuals have access to the same product offerings as small groups, and waiting periods and pre-existing condition limitations are generally not applied.[4] The merged market also limits the difference in premiums that can be charged to individuals and small groups.[5] Individuals and small groups may purchase coverage in the merged market on a guaranteed issue basis, without regard to medical history or past claims experience. As a result of the merged market, premiums for individuals purchasing health insurance products decreased significantly from individual pre-merger premiums. However, there is evidence that subsequent to these reforms some individuals have purchased coverage in the merged market for short periods of time, possibly in anticipation of using medical services, resulting in increased cost in the merged market.[6] This challenge was addressed by state legislation in 2010, and is described in Section D of this report.

4 Individuals with products issued prior to the merger may continue to renew those products. The pre-merger products are closed to new sales and continue to be rated as a separate block of business.

5 DHCFP's prior report *(Massachusetts Private Health Insurance Premium Trends 2006-2008)* found that on average, premiums for individuals in the merged market in 2008 were 33% lower than premiums in the residual non-group market, due to new risk pooling and rating rules, as well as expanded product offerings with less rich benefits in the merged market. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part2_premium_levels_and_trends.pdf, accessed 5/22/2011.

6 *Analysis of Individual Health Coverage In Massachusetts Before and After the July 1, 2007 Merger of the Small Group and Nongroup Health Insurance Markets*, June 2010. Available at: http://www.mass.gov/Eoca/docs/doi/Companies/adverse_selection_report.pdf, accessed 5/22/2011.

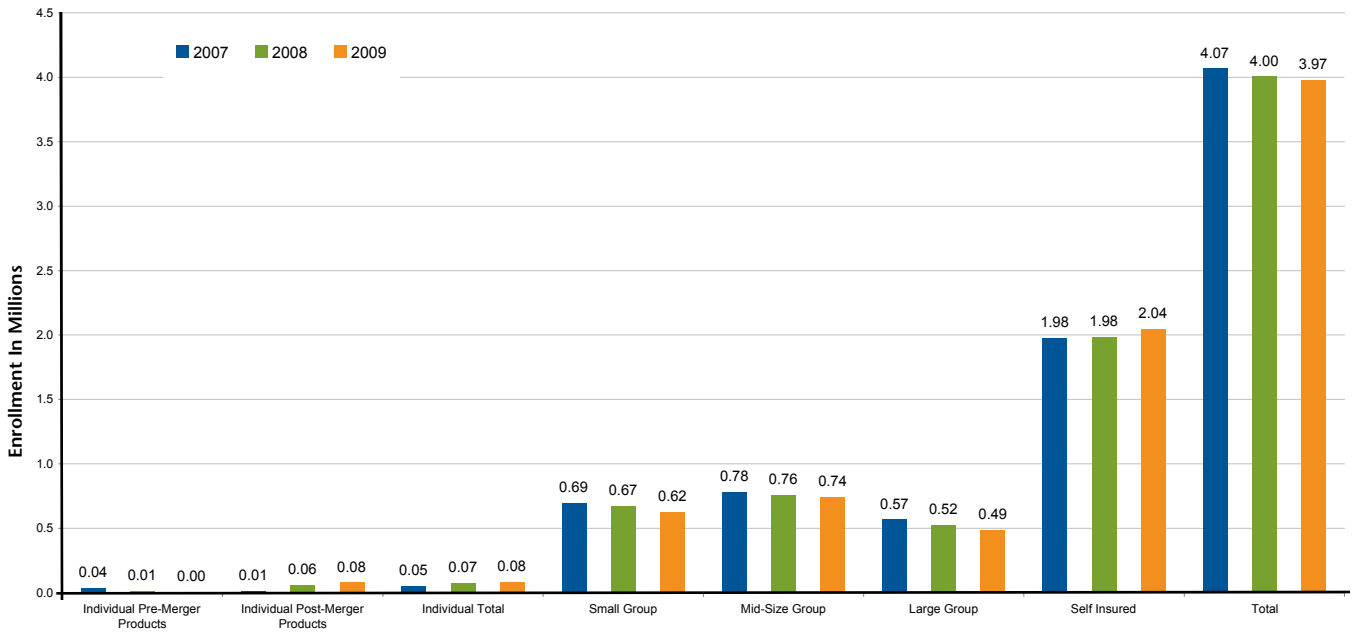
A. Beneficiaries

The findings in this section are based on membership data provided by insurance carriers in Massachusetts and include both resident and non-resident members of Massachusetts policies.

1. Membership by Market Sector

- Annual enrollment declined in all insured group market sectors (small, mid-size, and large) from 2007 to 2009, but increased in the individual and self-insured market sectors. In 2009, approximately 80,000 members (individuals and dependents) were insured in the individual market sector, 620,000 in small groups, 740,000 in mid-size groups, 490,000 in large groups, and 2,040,000 in self-insured groups (Figure A and Table 1).[7]

Figure A: Enrollment in Private Comprehensive Health Insurance Products by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

7 The size of each market sector may differ slightly from the prior report and from other reported statistics. For example, one recent study reports an increase in private enrollment of 395,000 members from June 30, 2006 to December 31, 2009. (See: DHCFP, *Health Care in Massachusetts: Key Indicators*, November 2010. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/10/key_indicators_november_2010.pdf, accessed 5/22/2011.) Differences from the prior report are primarily due to the participation of different carriers in this report. Differences from other reported statistics may be due to the following: (1) the exclusion of MassHealth and Commonwealth Care, (2) the exclusion of one carrier with significant self-insured enrollment; and (3) the inclusion of resident and non-resident members of Massachusetts policies in this study.

Table 1: Total Member Months and Distribution of Enrollment in Private Comprehensive Health Insurance Products, 2007-2009

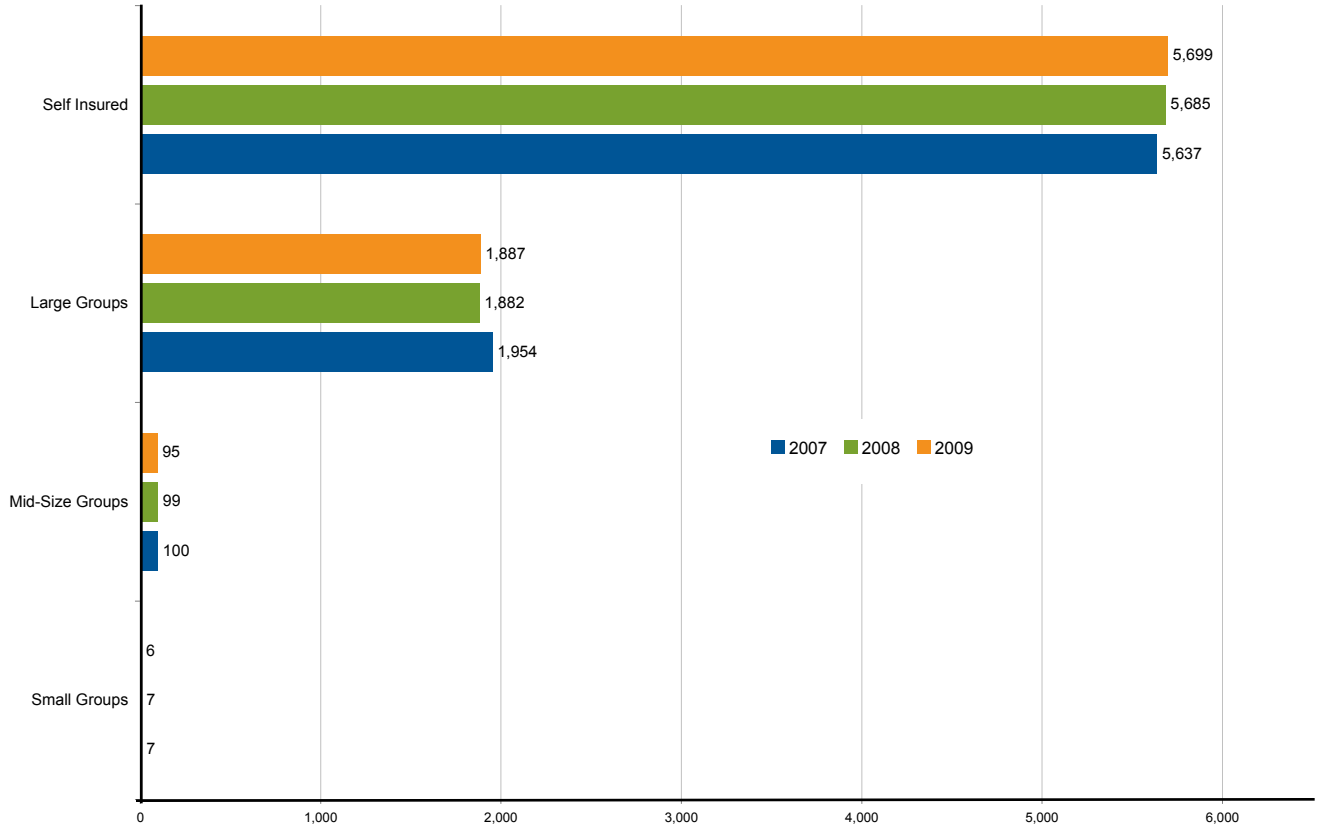
	2007		2008		2009	
	Member Months (in thousands)	Percent of Member Months	Member Months (in thousands)	Percent of Member Months	Member Months (in thousands)	Percent of Member Months
Individual Pre-Merger Products	0.4	0.9%	0.2	0.4%	0.0	0.1%
Individual Post-Merger Products	0.2	0.3%	0.7	1.4%	0.9	2.0%
Individual Total	0.6	1.2%	0.9	1.8%	1.0	2.0%
Small Group	8.3	17.0%	8.0	16.7%	7.5	15.7%
Mid-Size Group	9.4	19.2%	9.1	19.0%	8.9	18.6%
Large Group	6.8	13.9%	6.3	13.0%	5.8	12.2%
Self Insured	23.7	48.7%	23.8	49.6%	24.5	51.4%
Total	**48.8**	**100.0%**	**48.1**	**100.0%**	**47.7**	**100.0%**

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- The average size of insured small and mid-size groups (measured as the number of subscribers per employer) decreased from 2008 to 2009, while the average size of large groups and self-insured groups was relatively stable. While the average size of small groups only decreased from seven subscribers to six, the reduction of one average subscriber represented a decrease of more than ten percent. In 2009, small groups included an average of six covered employees, mid-size groups about 95 covered employees, and large groups nearly 1,900 covered employees. Self-insured employer groups included an average of about 5,700 covered employees (Figure B and Table 2).[8]

8 The reported values are significantly different than those shown in the prior DHCFP prior report *(Massachusetts Private Health Insurance Premium Trends 2006-2008)*, due to revisions in carriers' methodologies for calculating group size and due to the difference in carriers included in the study. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part2_premium_levels_and_trends.pdf, accessed 5/22/2011.

Figure B: Average Group Size by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Average group size is based on the number of enrolled subscribers (employees) per employer group, and not the number of members.

Table 2: Percent Change in Member Months and Average Group Size in Private Comprehensive Health Insurance Products, 2007-2009

	2007 to 2008		2008 to 2009	
	Percent Change in Member Months	Percent Change in Average Group Size	Percent Change in Member Months	Percent Change in Average Size
Individual	47.8%	N/A	14.1%	N/A
Small Group	-3.5%	-6.8%	-6.7%	-10.8%
Mid-Size Group	-2.7%	-1.3%	-2.6%	-3.5%
Large Group	-8.0%	-3.7%	-6.8%	0.3%
Self Insured	0.3%	0.8%	3.0%	0.2%
Total	**-1.5%**		**-0.8%**	

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

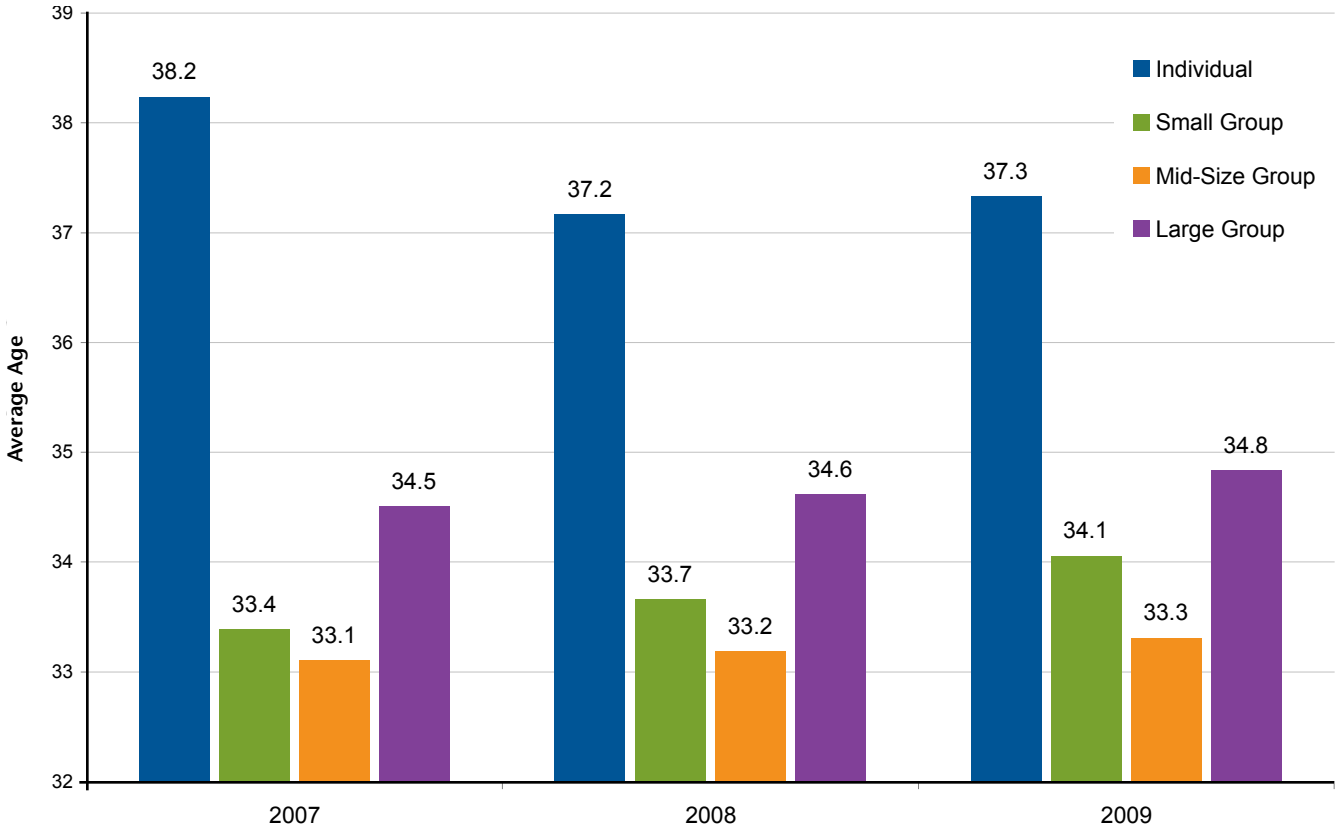
Note: Average group size is based on the number of enrolled subscribers (employees) per employer group, and not the number of members. Percentage change in average group size is based on unrounded results.

2. Age and Gender

Age is an important factor in health insurance premiums, as older enrollees tend to have higher health care costs. Age is an allowed rating factor in all market sectors, meaning these higher health care costs translate to higher premiums for older enrollees. However, the use of age as a rating factor is limited in the individual and small group market sectors. Gender is also an allowed rating factor in the mid-size and large group market sectors although not in the individual and small group sectors.

- The demographics of the enrolled population differed by market sector. On average, plan members in the individual market sector were older than those in the small, mid-size, and large group market sectors (Figure C). The individual market sector covered relatively few children aged 0 to 19 and relatively more adults aged 60 to 64 (Table 3).

Figure C: Average Age in Private Comprehensive Health Insurance Products by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Table 3: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Age and Gender, 2009

	Individual			Small Group			Mid-Size Group			Large Group		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	47.0%	53.0%	100.0%	50.8%	49.2%	100.0%	49.4%	50.6%	100.0%	47.6%	52.4%	100.0%
0-19	9.1%	8.8%	17.8%	14.0%	13.5%	27.4%	14.2%	13.5%	27.7%	13.6%	13.0%	26.6%
20-29	9.6%	9.4%	19.0%	7.0%	6.6%	13.6%	6.8%	7.5%	14.4%	6.4%	7.5%	14.0%
30-39	7.0%	7.4%	14.4%	7.1%	7.0%	14.1%	7.9%	8.4%	16.3%	6.8%	7.9%	14.7%
40-49	8.6%	9.0%	17.6%	10.0%	9.9%	19.9%	9.3%	9.7%	19.0%	8.1%	9.3%	17.4%
50-59	8.0%	10.0%	17.9%	8.9%	8.7%	17.6%	7.6%	8.0%	15.6%	7.4%	8.8%	16.2%
60-64	4.4%	7.8%	12.2%	3.1%	3.1%	6.2%	2.4%	2.5%	4.9%	3.0%	3.6%	6.6%
65+	0.4%	0.6%	1.1%	0.7%	0.5%	1.2%	1.2%	1.0%	2.1%	2.2%	2.3%	4.5%
Average Age	35.9	38.6	37.3	34.0	34.1	34.1	33.1	33.5	33.3	34.2	35.4	34.8

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Enrollment is measured as member months.

- Despite the higher average age of enrollees in the individual market sector, many 20 to 29 year olds were enrolled in individual coverage, and many of them in Young Adult Plans. At the end of 2009, approximately 4,400 individuals were enrolled in Young Adult Plans for individuals aged 18 to 26.[9]
- Across all insured group market sectors, the average age of enrollees increased modestly from 2007 to 2009, with small groups experiencing the largest increase from 33.4 years in 2007 to 34.1 years in 2009 (Figure C).[10] In contrast, the average age of enrollees in the individual market sector decreased from 38.2 years in 2007 to 37.3 years in 2009.
- In 2009, the individual and large group market sectors covered a larger share of females than the small group and mid-size group market sectors and proportionately fewer males (Table 3). Young women age 20-39 were most heavily represented in the individual market sector with 16.8 percent of covered lives and least represented in the small group market sector at 13.6 percent. Men age 50-64 were more heavily represented in the individual and small group market sectors with approximately 12 percent of covered lives in each market sector, compared with mid-size and large group market sectors at approximately 10 percent of covered lives.

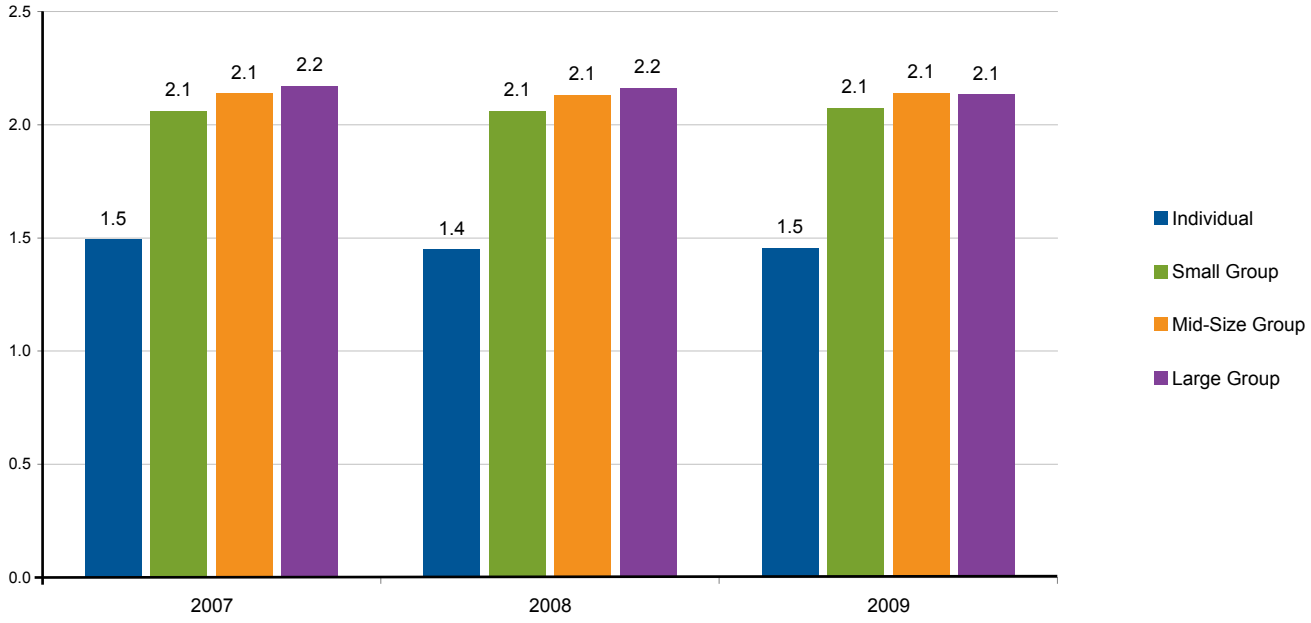
9 This estimate is based on enrollment as reported in the Commonwealth Connector Board meeting materials. Available at: https://www.mahealthconnector.org/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/About%2520Us/Publications%2520and%2520Reports/2010/2010-01-14/CommChoice%2520Board%2520Presentation%2520-%252001%252014%252010_DRAFTv5%2520Pres%2520%2520Version1%2520FINAL.pdf, accessed 3/24/2011.

10 Others have noted the "graying" of private group insurance nationally and the resulting impact on premiums. See: Patricia Seliger Keenan, David M. Cutler and Michael Chernew. *The 'Graying' of Group Health Insurance*. Health Affairs 25(6), 2006: 1497-1506. Available at: http://content.healthaffairs.org/cgi/content/full/25/6/1497, accessed 3/24/2011.

3. Contract Size[11]

- In 2009, the average contract size was larger in group market sectors at 2.1 members per contract than in the individual market sector with 1.5 members per contract. Contract size was about equal for small, mid-size, and large groups. This is consistent with fewer families and dependents enrolled in individual coverage in 2009.
- The pattern of larger contract sizes enrolled in group market sectors compared to the individual market sector was generally stable from 2007 to 2009 (Figure D).

Figure D: Average Number of Members per Contract, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

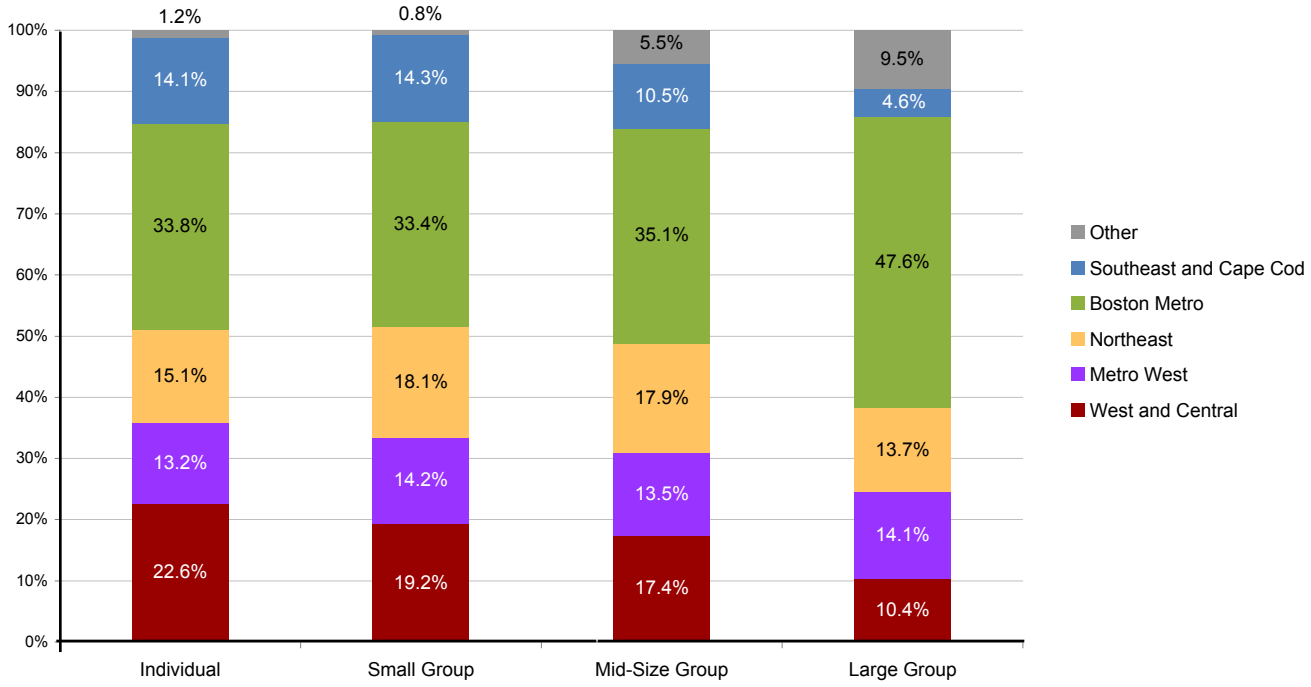
11 Contract size, or number of members per contract, includes both subscribers and their covered dependents.

4. Geographic Area

Geographic area is an important factor affecting health insurance premiums. In all insurance market sectors, premiums may vary based on the location of the employer or covered members, though less variation is permitted in the individual and small group market sectors. The variation in premiums typically reflects differences in service use and contractual reimbursement rates in different geographic areas, and is generally less than a 20 percent difference between the highest cost area and the lowest cost area.

- Nearly half of large group members were covered through employers based in the Boston metro area (Figure E).

Figure E: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Region, 2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.
Note: Region is based on the zip code of the employer and not the member in group sectors.

- In contrast, small and mid-size employer groups, as well as individual enrollees, were more likely to be located outside the Boston metro area in the Central, West, Northeast, and Southeast regions of the state.

5. Industry

Insurers may also use field of industry in setting premium rates in all insurance market sectors, although it is typically not used in setting rates in the individual market sector.

- More than half of insured large group enrollees (55 percent) in 2009 were employed in finance, insurance, or real estate; government; education; or health services (Table 4).

Table 4: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Industry, 2009

Industry Classification	Small Group	Mid-Size Group	Large Group
Agriculture, Forestry and Fishing	4%	0%	0%
Mining	0%	0%	0%
Construction	11%	4%	1%
Manufacturing	12%	18%	9%
Transportation, Communications, Electric, Gas, Sanitary Services	3%	4%	5%
Wholesale Trade	8%	6%	2%
Retail Trade	9%	6%	3%
Finance, Insurance and Real Estate	9%	8%	14%
Services	44%	48%	42%
Business Services	11%	12%	9%
Health Services	6%	9%	10%
Legal Services	3%	2%	2%
Educational Services	2%	6%	13%
Social Services	2%	4%	1%
Membership organizations	2%	1%	1%
Engineering, accounting, research, etc.	12%	11%	5%
Other Services	6%	3%	1%
Public Administration	0%	3%	18%
Non-Classifiable Establishments	0%	2%	4%
Total	100%	100%	100%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- In contrast, small group enrollees were relatively concentrated in construction; manufacturing; business services; and engineering, accounting, or research.

B. Premium Trends

Health insurance premium increases in Massachusetts continue to outpace inflation, as they have nationally.[12] From 2007 to 2009, group health insurance premiums in Massachusetts increased roughly 5 to 10 percent annually.[13] This compares to CPI-U[14] increases (for all goods and services) averaging 1.7 percent annually over the same time period nationwide and 2.0 percent in the Northeast. Despite the increase in premiums, the uninsured rate in Massachusetts has continued to decline since the state's health care reform became effective in late 2006.[15]

Some of the data in this section is presented as *unadjusted* and other data as *adjusted*. *Unadjusted* levels and trends represent exactly what the employer spent on health insurance premiums. In contrast, *adjusted* levels and trends are controlled for benefit levels and other demographic information to allow for direct comparison across groups and over time. *Adjusted* premium information includes only group sectors (small, mid-size, and large), not the individual sector or merged market.

On average, large groups purchased richer benefits than mid-size or small groups, resulting in large group premiums that consistently exceeded mid-size and small group premiums from 2007 to 2009. However, when adjusted for demographics, geographic area, and benefits, smaller groups paid higher premiums and experienced higher average premium trends than mid-size and large groups.[16]

12 Nationally, average annual private market premiums rose between 2.5% and 5% for single coverage from 2007 and 2009. Available at: http://ehbs.kff.org/?page=charts&id=1&sn=6&ch=1510, accessed 5/21/2011.

13 Premium trends are adjusted for benefits (Table 5).

14 Consumer Price Index – All Urban Consumers, available at: ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt, accessed 5/22/2011.

15 DHCFP's 2010 *Massachusetts Household Insurance Survey* found a decrease in the uninsured rate from 6.4 percent in 2006 to 1.9 percent in 2010. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/10/mhis_report_12-2010.pdf, accessed 5/22/2011.

16 Since the individual and small group markets were merged in 2007, individuals with post-merger products should have experienced similar adjusted premium trends to small groups.

17 While the premium and trend amounts are not directly comparable to those used in DHCFP's prior report (*Massachusetts Private Health Insurance Premium Trends 2006-2008*), since different carriers and in some cases different methodology were used, the findings are consistent. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part2_premium_levels_and_trends.pdf, accessed 5/22/2011.

This is consistent with the findings of DHCFP's prior study of premium trends.[17] It is important to note that premium increases for specific employers may vary significantly from the average.

The following sections describe premium trends and the variation in premium trends from 2007 to 2009. This analysis focuses on (1) aggregate historical premium trends, (2) variation in premium trends, (3) the most popular benefit plans, and (4) the lowest-cost benefit plans. Trends in the most popular and lowest-cost plans are described separately and compared for health maintenance organization (HMO)[18] and preferred provider plan (sometimes referred to as Preferred Provider Organization or "PPO")[19] products.

1. Historical Premium Trends[20]

- Average *unadjusted* individual premiums declined from $460 per member per month (pmpm) in 2007 to $405 pmpm in 2008, reflecting a shift in membership toward merged market products (Figure F). Individual premiums in the merged market rose four percent from 2008 to 2009 from $369 to $383 pmpm, while premiums for individuals in pre-merger products rose 27 percent from $542 in 2008 to $688 pmpm in 2009.
- Large groups paid higher *unadjusted* premiums pmpm than individuals in the merged market or in small or mid-size groups in 2009 (Figure F).

18 According to M.G.L. c. 176G and 211 CMR 43.00, a "health maintenance organization" is a company organized under the laws of the Commonwealth, or organized under the laws of another state and qualified to do business in the Commonwealth, which:

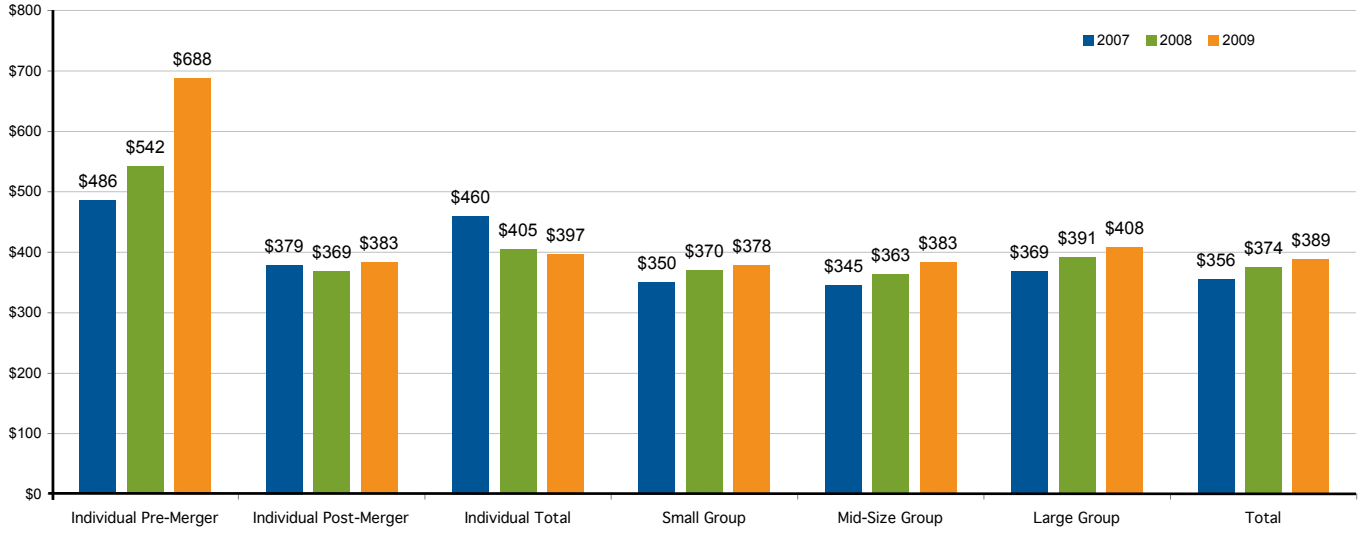
(1) provides or arranges for the provision of health services to voluntarily enrolled members in exchange primarily for a prepaid per capita or aggregate fixed sum.

(2) demonstrates to the satisfaction of the commissioner proof of its capability to provide its members protection against loss of prepaid fees or unavailability of covered health services resulting from its insolvency or bankruptcy or from other financial impairment of its obligations to its members.

19 According to 211 CMR 51.00, an insured preferred provider plan is "an insured health benefit plan offered by an organization that provides incentives for covered persons to receive health care services from preferred providers in the context of a preferred provider arrangement."

20 The individual market was excluded from the adjusted premium analyses. Several carriers did not provide the necessary data to complete the analysis. A more detailed explanation is provided in the "Methodology and Process" section of this report.

Figure F: Unadjusted Premiums per Member per Month by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.
Note: Individual pre-merger products are a closed block of products that may continue to be renewed by existing policyholders.

- The trend in *adjusted* premiums was higher for small groups than mid-size or large groups (Table 5).[21] From 2008 to 2009, the *adjusted* premium trends averaged 8.5 percent for small groups, 6.9 percent for mid-size groups, and 5.1 percent for large groups.[22]

21 Pursuant to 211 CMR 66.08, individuals in the merged market may be charged up to 15.8 percent more than small groups with similar demographics. The allowable group size range is 0.95 to 1.10. On a percentage basis, the range from 0.95 to 1.10 is equal to a premium difference of 15.8 percent.

22 Trend rates were calculated using un-rounded pmpm amounts, not the rounded amounts shown in Table 5.

Table 5: Unadjusted and Adjusted Premiums PMPM, and Percent Change in Premiums for Private Comprehensive Health Insurance Products, 2007-2009

Unadjusted Premium PMPM					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$350	$370	$378	5.8%	2.2%
Mid-Size Group	$345	$363	$383	5.2%	5.6%
Large Group	$369	$391	$408	6.1%	4.3%
Adjusted for: Age and Gender					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$397	$417	$422	5.0%	1.2%
Mid-Size Group	$366	$384	$403	4.8%	4.9%
Large Group	$365	$386	$402	5.7%	4.0%
Adjusted for: Geographic Area					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$357	$377	$386	5.7%	2.2%
Mid-Size Group	$348	$365	$386	5.2%	5.6%
Large Group	$370	$393	$409	6.1%	4.2%
Adjusted for: Benefits					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$420	$461	$505	9.8%	9.5%
Mid-Size Group	$408	$433	$466	6.1%	7.6%
Large Group	$424	$451	$475	6.2%	5.4%
Adjusted for: Group Size					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$335	$354	$361	5.7%	2.1%
Mid-Size Group	$345	$363	$383	5.2%	5.6%
Large Group	$369	$391	$408	6.1%	4.3%
Adjusted for: All Factors					
	Premium PMPM			Percent Change	
	2007	2008	2009	2007-2008	2008-2009
Small Group	$465	$505	$548	8.8%	8.5%
Mid-Size Group	$436	$461	$493	5.8%	6.9%
Large Group	$422	$447	$470	6.0%	5.1%

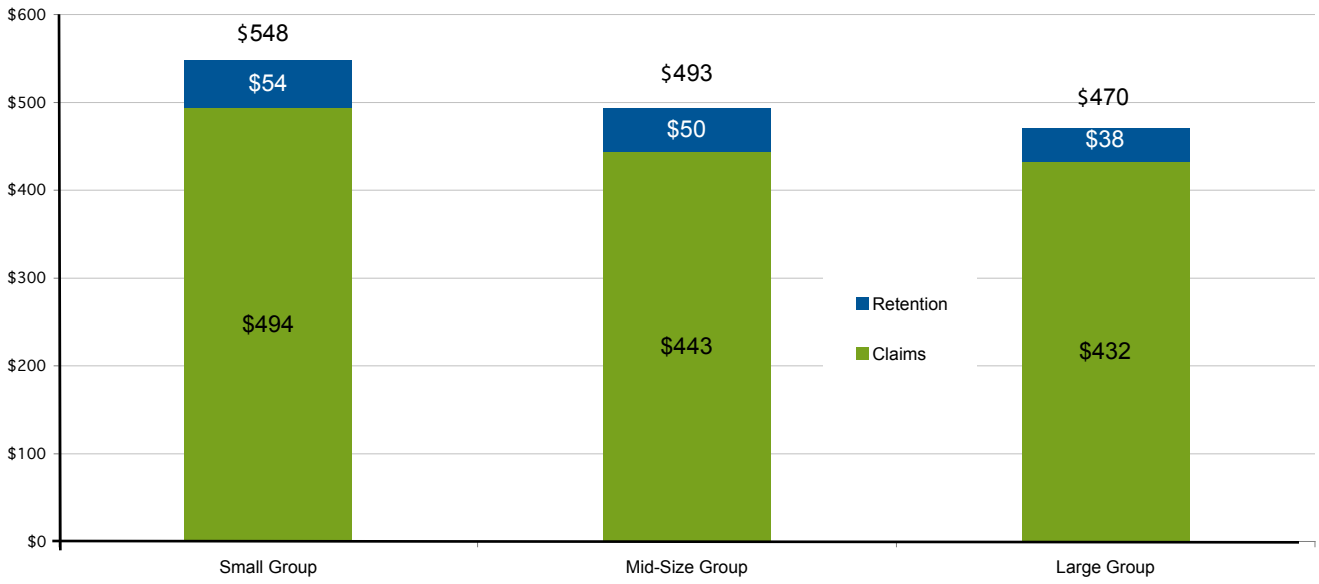
Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Trend rates were calculated from un-rounded pmpm amounts (not shown).

- Any specific employer group can experience premium trends that vary substantially from the average trend of its market sector. For small group employers, premium volatility can be especially large due to changes in subscriber demographics (as each subscriber represents a significant percentage of the total group) or changes in the number of enrolled subscribers (as most carriers set premium rates based in part on the size of the group). These effects are magnified if the carrier also changes its rating factors[23] or product design relativities.

- The higher small group premiums were driven primarily by higher claims costs, and to a lesser extent higher retention charges (non-medical spending), compared to other group sizes (Figure G). However, this analysis is based on actual loss ratios and retention and may not reflect how the carriers established their pricing.[24]

Figure G: Decomposition of Premium PMPM Adjusted for All Rating Factors, 2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

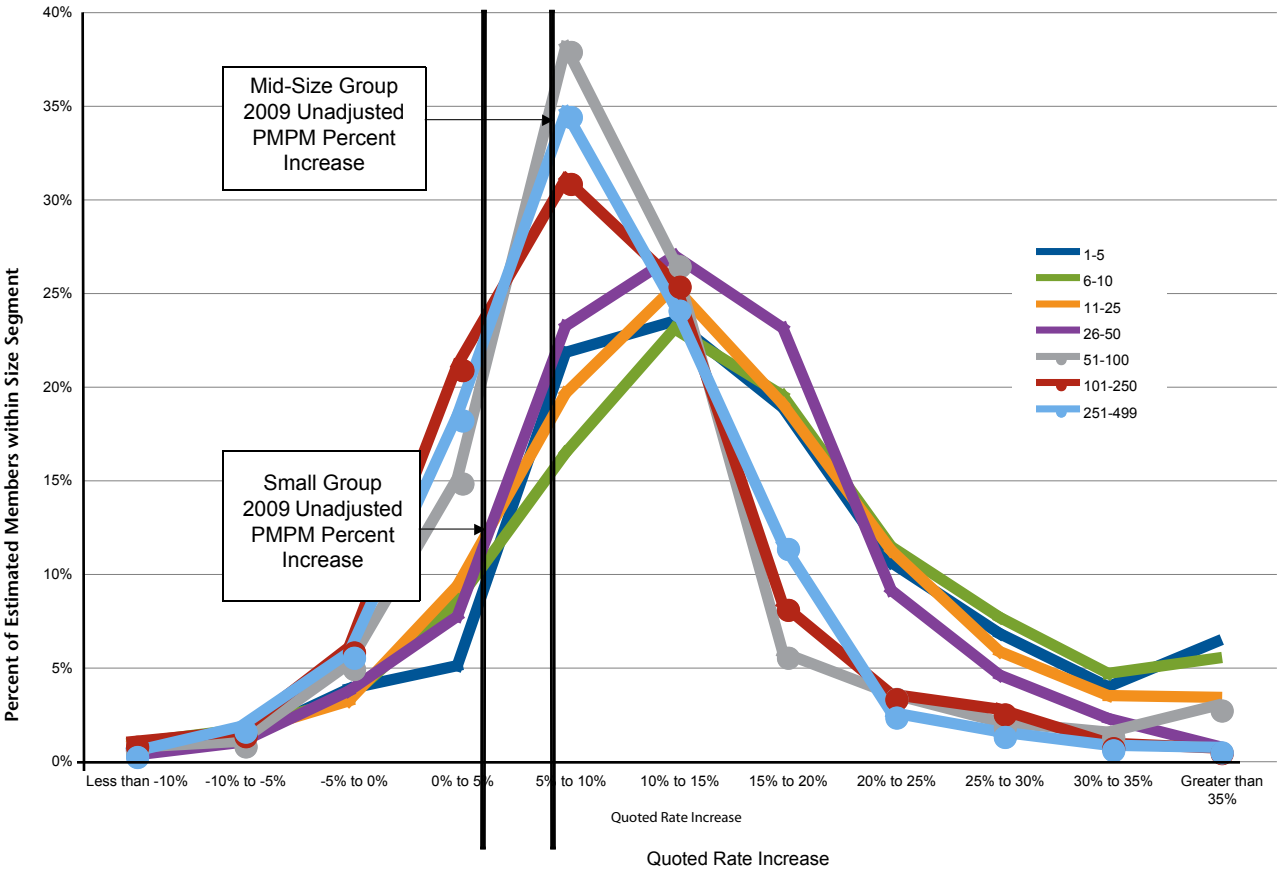
23 Per 211 CMR 66.00 (Small Group Health Insurance), a "rating factor" may relate to characteristics including, but not limited to, age, industry, rate basis type, geography, wellness program usage or tobacco usage. "Rate Basis Type" is defined as each category of single or multi-party composition for which a carrier charges separate rates. For the purpose of 211 CMR 66.00, carriers shall use at least any combination of the following categories: (a) single; (b) two adults: (c) one adult and one or more children; and (d) two adults and one or more children.

24 DHCFP's prior report (*Massachusetts Private Health Insurance Premium Trends 2006-2008*), which included different carriers and to some extent different methodology, showed a smaller difference between small group and large group retention based on adjusted premiums. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part2_premium_levels_and_trends.pdf, accessed 5/22/2011.

2. Variation in Premium Trends

- Premium growth volatility can be substantial in the small group market. In 2009, small groups had the greatest variation in rate increases of any other group sector (Figure H), reflecting greater volatility in the demographics of the members of small groups.

Figure H: Distribution of Enrollment by Quoted Rate Increase, Small and Mid-Size Group



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- Quoted rate increases reflect the rate increases that would be charged if the employer made no changes to benefit plan(s). Benefit levels decreased over the three years across all group sizes, but it was most notable in the small group market. Specifically, the difference between the median small group quoted rate increase and the *unadjusted* pmpm premium increase was very large, which is likely due to small employers buying down benefits after receiving the initial quoted rate increase. There are also several other possible drivers for this difference:
  - The *unadjusted* pmpm premium increase from 2008 to 2009 is affected by rate increases implemented from February 2008 through December 2009. The quoted rate increases that would have been implemented from January 2009 through December 2009, if accepted by the employers. Therefore, the *unadjusted* pmpm premium increase and quoted rate increases do not cover identical time periods.
  - Changes that reduce premiums but are not attributable to changes in benefits can also affect *unadjusted* pmpm premiums. An employer might change carriers to obtain similar benefits at a lower price, or change to a more limited network plan with otherwise similar benefits.[25] Neither change would be reflected in the quoted rate increase (or show in the *adjusted* trend analysis), but either could result in a lower premium pmpm.
  - Some employers may drop coverage after receiving a quoted rate increase. This could happen if the employer decided to stop offering coverage or went out of business. Alternatively, the quoted rate may no longer apply if, for example, the group added employees (becoming a mid-size group instead of a small group) or changed from fully insured to self-insured status. The reported data would show an employer moving into another market segment as dropped coverage in the prior market segment.
- Among small groups, average benefits decreased 3.6 percent from 2007 to 2008 and 6.6 percent from 2008 to 2009.[26]
- In the mid-size group market sector, the median quoted rate increase was somewhat higher than the *unadjusted* pmpm premium increase in 2009, possibly due to benefit buy-down (Figure H).

25 Given the limitations of the data available, this analysis did not include limited network impact in the actuarial value.

26 Although the benefit buy-down data is not explicitly shown, the impact of the benefit buy-down can be observed by comparing the *unadjusted* premium trend to the benefit *adjusted* premium trend in Table 5.

3. Most Popular Plans By Market Sector[27]

- In 2009, the most popular type of plan in all market sectors was an HMO plan. In the small group market sector, roughly 95 percent of enrollees were enrolled in an HMO plan.
- In all market sectors, the concentration of enrollment in the most popular plan was less each subsequent year.[28] At the end of 2009, 13 percent of members in the merged market were enrolled in the most popular plan, compared with 4 percent in mid-size groups and 8 percent in large groups (Table 6).

Table 6: Percent of Total Enrollment in Most Popular HMO Private Comprehensive Health Insurance Plan, 2007-2009

	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009
Individual Post-Merger	N/A	N/A	17.6%	17.3%	16.6%	15.5%	14.9%	17.3%	17.8%	16.8%	15.6%	13.2%
Small Group	18.5%	18.6%	17.9%	17.4%	15.5%	11.1%	14.6%	14.4%	14.2%	11.9%	12.7%	13.0%
Mid-Size Group	8.0%	8.2%	8.5%	8.2%	7.6%	6.7%	5.1%	4.4%	4.5%	4.1%	4.0%	3.7%
Large Group	8.0%	7.8%	7.6%	7.5%	7.8%	7.8%	5.4%	8.0%	7.5%	7.5%	7.6%	7.7%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Large groups may have a higher percentage of enrollment in the most popular plan than mid-size groups due to a relatively small number of very large employers.

- The most popular HMO plans covered at least 4 percent of members in a given market sector during the study period (Table 6).

27 Carriers were asked to provide the one most popular product in each calendar quarter for each market segment. The most popular product, therefore, can change over time as the distribution of enrollment changes. To see the overall changes in premiums over time, refer to the section B.1 of this report.

28 It is not possible to know why the concentration in the most popular plan decreased, but it is possible this could be the result of more product choice.

- In general, the most popular HMO benefits were richer for groups than for individuals, and richer for large groups than for mid-size or small groups. In addition, the most popular product changed over time (Table 7).

Table 7: Most Popular HMO Benefit Plans in Private Comprehensive Health Insurance Products, 2007-2009 (continued on next page)

Individual Post-Merger	2007			2008			2009		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.538	0.545	0.774	0.538	0.609	0.859	0.538	0.609	0.859
Deductible	$2,000	$2,000	$2,000	$2,000	$2,000	$0	$2,000	$2,000	$0
Coinsurance	100%	80%	100%	100%	80%	100%	100%	80%	100%
PCP Office Visit	$25	$25	$35	$25	$25	$25	$25	$25	$25
SPC Office Visit	$40	$25	$50	$40	$25	$25	$40	$25	$25
Inpatient Copay	$500	Deductible	Deductible	$500	Deductible	$800	$500	Deductible	$800
Outpatient Surgery Copay	$250	Deductible	Deductible	$250	Deductible	$250	$250	Deductible	$250
Emergency Room Copay	$200	$85	$200	$200	$85	$100	$200	$85	$100
Pharmacy Deductible	$0	n/a	$0	$0	$100	$0	$0	$100	$0
Retail Generic	$15	n/a	$0	$15	$15	$15	$15	$15	$15
Retail Preferred	$50	n/a	$0	$50	$50	$30	$50	$50	$30
Retail Non-Preferred	$100	n/a	$0	$100	$50	$50	$100	$50	$50
Small Group	**2007**			**2008**			**2009**		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.763	0.882	0.978	0.763	0.870	0.947	0.686	0.837	0.947
Deductible	$1,000	$0	$0	$1,000	$0	$0	$2,000	$0	$0
Coinsurance	100%	100%	100%	100%	100%	100%	100%	100%	100%
PCP Office Visit	$20	$20	$10	$20	$20	$10	$20	$25	$10
SPC Office Visit	$20	$20	$10	$20	$20	$10	$35	$25	$10
Inpatient Copay	Deductible	$500	Deductible	Deductible	$500	$175	$600	$1,000	$175
Outpatient Surgery Copay	Deductible	$250	Deductible	Deductible	$500	$50	$600	$500	$50
Emergency Room Copay	$90	$75	$50	$90	$50	$42	$150	$100	$42
Pharmacy Deductible	$250	$0	$0	$250	$0	$0	$0	$0	$0
Retail Generic	$10	$15	$5	$10	$10	$10	$15	$15	$10
Retail Preferred	$30	$30	$15	$30	$30	$20	$30	$30	$20
Retail Non-Preferred	$50	$50	$35	$50	$50	$35	$50	$50	$35
Mid-Size Group	**2007**			**2008**			**2009**		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.882	0.947	1.000	0.686	0.882	0.947	0.770	0.859	0.947
Deductible	$0	$0	$0	$2,000	$0	$0	$2,000	$0	$0
Coinsurance	100%	100%	100%	100%	100%	100%	100%	100%	100%
PCP Office Visit	$20	$10	$5	$20	$20	$10	$15	$25	$10
SPC Office Visit	$20	$10	$5	$35	$20	$10	$15	$25	$10
Inpatient Copay	$500	$175	Deductible	$600	$500	$175	$350	$800	$175
Outpatient Surgery Copay	$250	$50	Deductible	$600	$250	$50	$350	$250	$50
Emergency Room Copay	$75	$42	$25	$150	$75	$42	$100	$100	$42
Pharmacy Deductible	$0	$0	$0	$0	$0	$0	$0	$0	$0
Retail Generic	$15	$10	$5	$15	$15	$10	$15	$15	$10
Retail Preferred	$30	$20	$10	$30	$30	$20	$30	$30	$20
Retail Non-Preferred	$50	$35	$25	$50	$50	$35	$50	$50	$35

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

Table 7: Most Popular HMO Benefit Plans in Private Comprehensive Health Insurance Products, 2007-2009 (continued from previous page)

Large Group	2007			2008			2009		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.921	0.934	0.954	0.837	0.921	0.947	0.721	0.913	0.947
Deductible	$0	$0	$0	$0	$0	$0	$500	$0	$0
Coinsurance	100%	100%	100%	100%	100%	100%	100%	100%	100%
PCP Office Visit	$20	$15	$15	$25	$20	$10	$25	$15	$10
SPC Office Visit	$30	$15	$15	$25	$30	$10	$25	$15	$10
Inpatient Copay	$100	$250	Deductible	$1,000	$100	$175	$250	$250	$175
Outpatient Surgery Copay	$100	$75	Deductible	$500	$100	$50	$250	$150	$50
Emergency Room Copay	$100	$75	$50	$100	$100	$42	$100	$100	$42
Pharmacy Deductible	$0	$0	$0	$0	$0	$0	$0	$0	$0
Retail Generic	$10	$5	$10	$15	$10	$10	$15	$10	$10
Retail Preferred	$20	$20	$20	$30	$20	$20	$40	$30	$20
Retail Non-Preferred	$35	$60	$35	$50	$35	$35	$75	$50	$35

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

- Enrollment in the most popular PPO benefit plans was lower than in the most popular HMO plans, leading to greater variability in the most popular PPO benefit plan from quarter to quarter (Table 8). However, the same pattern of richer benefits in large groups, compared with mid-size or small groups was observed with the most popular PPO plans (Table 9).

Table 8: Percent of Total Enrollment in Most Popular PPO Private Comprehensive Health Insurance Plan, 2007-2009

	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009
Individual Post-Merger	N/A	N/A	4.1%	3.2%	2.4%	2.2%	4.1%	5.6%	4.7%	3.6%	5.7%	7.8%
Small Group	4.3%	4.1%	3.8%	3.6%	2.9%	2.1%	2.8%	2.8%	2.3%	2.5%	3.3%	3.5%
Mid-Size Group	2.9%	2.9%	2.9%	2.8%	2.9%	2.9%	2.7%	2.9%	3.0%	3.0%	3.0%	3.1%
Large Group	2.7%	2.6%	2.0%	2.0%	2.1%	1.9%	1.4%	2.0%	2.0%	2.0%	1.8%	1.8%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Table 9: Most Popular PPO Benefit Plans in Private Comprehensive Health Insurance Products, 2007-2009

Small Group	2007			2008			2009		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.747	0.798	0.898	0.775	0.798	0.898	0.727	0.798	0.889
Deductible	$1,000	$500	$0	$1,000	$500	$0	$1,000	$500	$0
IN Coinsurance	100%	100%	100%	100%	100%	100%	100%	100%	100%
OUT Coinsurance	80%	80%	80%	80%	80%	80%	80%	80%	80%
PCP Office Visit	$20	$20	$15	$20	$20	$15	$15	$20	$15
SPC Office Visit	$20	$20	$15	$20	$20	$15	$15	$20	$15
Inpatient Copay	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible	$250
Outpatient Surgery Copay	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible	$250
Emergency Room Copay	$90	$90	$50	$100	$90	$50	Deductible	$90	$50
Pharmacy Deductible	$250	$250	$0	$100	$250	$0	$0	$250	$0
Retail Generic	$10	$10	$10	$10	$10	$10	$15	$10	$10
Retail Preferred	$30	$30	$25	$30	$30	$25	$30	$30	$30
Retail Non-Preferred	$50	$50	$40	$45	$50	$40	$50	$50	$50

Mid-Size Group	2007			2008			2009		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.777	0.856	0.920	0.777	0.856	0.891	0.559	0.825	0.856
Deductible	$1,200	$250	$0	$1,200	$250	$0	$2,000	$500	$250
IN Coinsurance	100%	100%	100%	100%	100%	100%	80%	90%	100%
OUT Coinsurance	80%	80%	80%	80%	80%	80%	60%	80%	80%
PCP Office Visit	$0	$15	$10	$0	$15	$15	$25	$10	$15
SPC Office Visit	$0	$15	$10	$0	$15	$15	$25	$10	$15
Inpatient Copay	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible	Deductible
Outpatient Surgery Copay	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible	Deductible
Emergency Room Copay	Deductible	$50	$50	Deductible	$50	$50	$250	Deductible	$50
Pharmacy Deductible	$0	$0	$0	$0	$0	$0	$0	$0	$0
Retail Generic	$5	$10	$10	$5	$10	$10	$15	$10	$10
Retail Preferred	$15	$25	$20	$15	$25	$25	$30	$20	$25
Retail Non-Preferred	$30	$45	$35	$30	$45	$45	$50	$35	$45

Large Group	2007			2008			2009		
	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.671	0.864	0.934	0.671	0.891	0.903	0.713	0.815	0.898
Deductible	$2,500	$250	$0	$2,500	$250	$0	$1,500	$250	$0
IN Coinsurance	100%	100%	100%	100%	90%	100%	100%	90%	100%
OUT Coinsurance	80%	80%	80%	80%	70%	80%	80%	70%	80%
PCP Office Visit	$20	$15	$15	$20	$15	$20	$20	$0	$15
SPC Office Visit	$20	$15	$15	$20	$15	$20	$20	$0	$15
Inpatient Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	$250
Outpatient Surgery Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	$250
Emergency Room Copay	$100	$50	$50	$100	$50	$75	Deductible	$100	$50
Pharmacy Deductible	$0	$0	$0	$0	$0	$0	$1,500	$0	$0
Retail Generic	$15	$10	$10	$15	$0	$10	$10	$10	$10
Retail Preferred	$30	$20	$20	$30	$0	$25	$25	$25	$25
Retail Non-Preferred	$50	$35	$35	$50	$0	$40	$40	$40	$40

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The individual market sector is not shown because too few carriers reported data. The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

- The most popular group plans are HMO plans and generally included no deductibles, whereas the median most popular individual plans (also HMO) included a $2,000 deductible.
- Deductibles and copayments generally increased from 2007 to 2009. In the small group market sector the median most popular HMO inpatient copayment across carriers increased from $500 to $1,000, as the actuarial value of the median most popular plan across carriers decreased.[29]
- In the small group market sector, the weighted average actuarial value declined from 0.85 in the first quarter of 2007, to 0.73 in the fourth quarter of 2009 (Table 10). In 2009, the buy-down to lower-value coverage decreased the average actuarial value of coverage in small groups by 6.6 percent. While only five percent of small group enrollees were insured under plans with an actuarial value less than or equal to 0.70 during the first quarter of 2007, 50 percent of small group enrollees were insured under such plans by the fourth quarter of 2009 (Table 10).

Table 10: Percent of Small Group Enrollees by Actuarial Value, 2007-2009

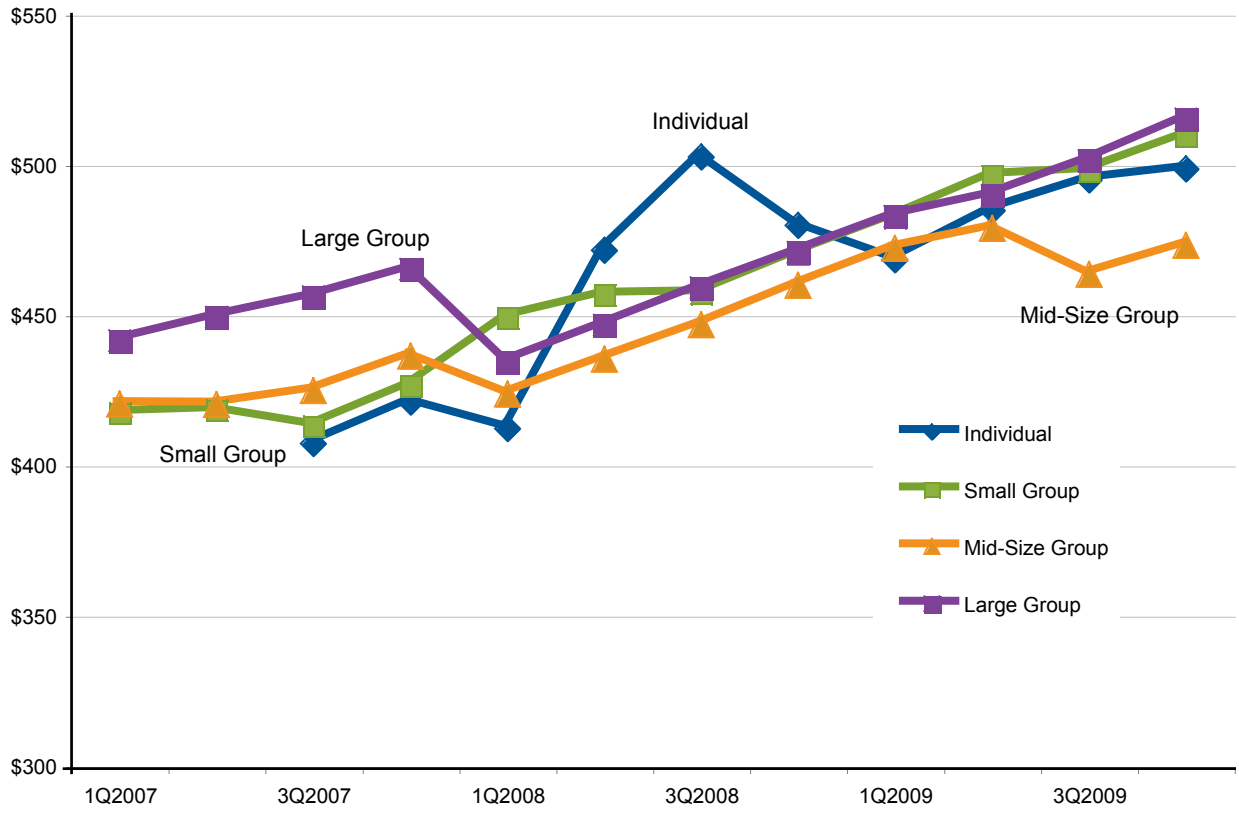
Actuarial Value	2007Q1	2007Q2	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2009Q3	2009Q4
0.651 - 0.700	5%	6%	8%	10%	13%	15%	18%	21%	27%	37%	46%	50%
0.701 - 0.750	5%	5%	4%	4%	4%	3%	3%	3%	4%	6%	7%	8%
0.751 - 0.800	11%	14%	16%	21%	23%	27%	28%	30%	29%	25%	21%	20%
0.801 - 0.850	32%	33%	31%	29%	27%	25%	23%	21%	20%	17%	14%	11%
0.851 - 0.900	14%	13%	13%	11%	11%	9%	8%	8%	6%	4%	4%	4%
0.901 - 0.950	29%	25%	24%	21%	19%	18%	17%	15%	13%	9%	6%	6%
0.951 - 1.000	5%	4%	4%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Weighted Actuarial Value	**0.85**	**0.84**	**0.83**	**0.82**	**0.82**	**0.81**	**0.80**	**0.79**	**0.78**	**0.76**	**0.74**	**0.73**
% HMO Membership	95%	95%	96%	96%	96%	96%	96%	96%	96%	96%	95%	94%
% PPO Membership	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	5%	6%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- From 2007 to 2009, premiums paid for the most popular HMO plans were similar across insurance market sectors. This is likely due to individuals and small groups purchasing less rich benefits, offsetting the dual effects of higher base rates in the merged market and the group size factor applied to individuals in the merged market (Figure I).

29 Actuarial value is a measure of the relative richness of a benefit plan. Generally, the higher the actuarial value, the lower the patient's cost-sharing. In this analysis, the actuarial value for the richest plan offered by any carriers submitting data was set equal to 1.00. This plan included very little patient cost-sharing.

Figure I: Median Monthly Premiums for Single Coverage for the Most Popular HMO Products by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- The large increase in individual premiums from first quarter 2008 to third quarter 2008 coincided with significant new entry of individuals into the merged market. Later entrants to the market chose richer benefits than early entrants, driving up the actuarial value and the median individual premium. It is not possible to know the cause of this trend. Two carriers reported a change in the most popular individual product in the second quarter of 2008, and another reported a change in the third quarter. For all three carriers, their most popular individual product took on a richer benefit design.

4. Lowest-Cost Plans[30]

- Enrollment in the lowest-cost HMO plan or the lowest-cost PPO plan was uniformly low. From 2007 to 2009, enrollment in the lowest-cost HMO and PPO plans combined increased to just two percent in the merged market and one percent in the mid-size and large group market sectors (Table 11 and Table 12).

Table 11: Percent of Total Enrollment in Least Expensive HMO Private Comprehensive Health Insurance Plan, 2007-2009

	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009
Merged Market	0.6%	0.7%	0.3%	0.4%	0.7%	0.9%	1.0%	1.0%	1.2%	1.3%	1.3%	1.4%
Mid- and Large Group	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Table 12: Percent of Total Enrollment in Least Expensive PPO Private Comprehensive Health Insurance Plan, 2007-2009

	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009	2Q2009	3Q2009	4Q2009
Merged Market	0.4%	0.1%	0.0%	0.0%	0.1%	0.2%	0.4%	0.6%	0.8%	0.9%	1.0%	1.1%
Mid- and Large Group	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.4%	0.5%	0.6%	0.7%	0.7%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

30 The plans discussed in this section were the lowest-cost plans offered in each market sector, but they do not necessarily have membership in each market sector.

- With the introduction of new low-cost plan options in 2007 and 2008 as a result of reform, the median and high actuarial values of the lowest-cost comprehensive HMO products declined in all market sectors from 2007 to 2009 (Table 13).

Table 13: Lowest-Cost Private Comprehensive HMO Health Insurance Products - 2007-2009 (continued on next page)

Individual Post-Merger	2007 Minimum Product	2007 Median Product	2007 Maximum Product	2008 Minimum Product	2008 Median Product	2008 Maximum Product	2009 Minimum Product	2009 Median Product	2009 Maximum Product
Actuarial Value	0.538	0.614	0.711	0.538	0.609	0.698	0.507	0.589	0.698
Deductible	$2,000	$1,500	$2,000	$2,000	$2,000	$2,000	$2,000	$1,750	$2,000
Coinsurance	100%	80%	100%	100%	80%	100%	100%	80%	100%
PCP Office Visit	$25	$25	$20	$25	$25	$20	$25	$25	$20
SPC Office Visit	$40	$25	$20	$40	$25	$20	$40	$25	$20
Inpatient Copay	$500	Deductible	Deductible	$500	Deductible	Deductible	$500	Deductible	Deductible
Outpatient Surgery Copay	$250	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible
Emergency Room Copay	$200	$250	$75	$200	$85	$80	$200	$250	$80
Pharmacy Deductible	$0	$0	$0	$0	$100	$250	$0	$250	$250
Retail Generic	$15	$15	$10	$15	$15	$10	$25	$15	$10
Retail Preferred	$50	$50	$25	$50	$50	$30	$100	$50	$30
Retail Non-Preferred	$100	$50	$50	$100	$50	$50	$100	$50	$50
Small Group	**2007 Minimum Product**	**2007 Median Product**	**2007 Maximum Product**	**2008 Minimum Product**	**2008 Median Product**	**2008 Maximum Product**	**2009 Minimum Product**	**2009 Median Product**	**2009 Maximum Product**
Actuarial Value	0.538	0.698	0.803	0.538	0.609	0.698	0.507	0.589	0.698
Deductible	$2,000	$2,000	$1,000	$2,000	$2,000	$2,000	$2,000	$1,750	$2,000
Coinsurance	100%	100%	100%	100%	80%	100%	100%	80%	100%
PCP Office Visit	$25	$20	$20	$25	$25	$20	$25	$25	$20
SPC Office Visit	$40	$20	$20	$40	$25	$20	$40	$25	$20
Inpatient Copay	$500	Deductible	Deductible	$500	Deductible	Deductible	$500	Deductible	Deductible
Outpatient Surgery Copay	$250	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible
Emergency Room Copay	$200	$80	$84	$200	$85	$80	$200	$250	$80
Pharmacy Deductible	$0	$250	$100	$0	$100	$250	$0	$250	$250
Retail Generic	$15	$10	$10	$15	$15	$10	$25	$15	$10
Retail Preferred	$50	$30	$25	$50	$50	$30	$100	$50	$30
Retail Non-Preferred	$100	$50	$40	$100	$50	$50	$100	$50	$50
Mid-Size Group	**2007 Minimum Product**	**2007 Median Product**	**2007 Maximum Product**	**2008 Minimum Product**	**2008 Median Product**	**2008 Maximum Product**	**2009 Minimum Product**	**2009 Median Product**	**2009 Maximum Product**
Actuarial Value	0.538	0.698	0.803	0.538	0.609	0.737	0.507	0.589	0.737
Deductible	$2,000	$2,000	$1,000	$2,000	$2,000	$2,000	$2,000	$1,750	$2,000
Coinsurance	100%	100%	100%	100%	80%	100%	100%	80%	100%
PCP Office Visit	$25	$20	$20	$25	$25	$20	$25	$25	$20
SPC Office Visit	$40	$20	$20	$40	$25	$20	$40	$25	$20
Inpatient Copay	$500	Deductible	Deductible	$500	Deductible	Deductible	$500	Deductible	Deductible
Outpatient Surgery Copay	$250	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible
Emergency Room Copay	$200	$80	$84	$200	$85	$100	$200	$250	$100
Pharmacy Deductible	$0	$250	$100	$0	$100	$100	$0	$250	$100
Retail Generic	$15	$10	$10	$15	$15	$10	$25	$15	$10
Retail Preferred	$50	$30	$25	$50	50%	$30	$100	50%	$30
Retail Non-Preferred	$100	$50	$40	$100	50%	$45	$100	50%	$45

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

Table 13: Lowest-Cost Private Comprehensive HMO Health Insurance Products - 2007-2009 (continued from previous page)

Large Group	2007			2008			2009		
	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product
Actuarial Value	0.538	0.698	0.803	0.538	0.609	0.737	0.507	0.589	0.737
Deductible	$2,000	$2,000	$1,000	$2,000	$2,000	$2,000	$2,000	$1,750	$2,000
Coinsurance	100%	100%	100%	100%	80%	100%	100%	80%	100%
PCP Office Visit	$25	$20	$20	$25	$25	$20	$25	$25	$20
SPC Office Visit	$40	$20	$20	$40	$25	$20	$40	$25	$20
Inpatient Copay	$500	Deductible	Deductible	$500	Deductible	Deductible	$500	Deductible	Deductible
Outpatient Surgery Copay	$250	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible
Emergency Room Copay	$200	$80	$84	$200	$85	$100	$200	$250	$100
Pharmacy Deductible	$0	$250	$100	$0	$100	$100	$0	$250	$100
Retail Generic	$15	$10	$10	$15	$15	$10	$25	$15	$10
Retail Preferred	$50	$30	$25	$50	50%	$30	$100	50%	$30
Retail Non-Preferred	$100	$50	$40	$100	50%	$45	$100	50%	$45

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

- The lowest-cost PPO plan was generally the same product in each market sector from 2007 to 2009, although one carrier offered a lowest-cost PPO product in the mid-size and large group market sectors that was not available in the merged market (Table 14).

Table 14: Lowest-Cost Private Comprehensive PPO Health Insurance Products - 2007-2009 (continued on next page)

Individual Post-Merger	2007			2008			2009		
	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product
Actuarial Value	0.514	0.524	0.712	0.514	0.524	0.712	0.514	0.524	0.712
Deductible	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000
Coinsurance	80%	80%	100%	80%	80%	100%	80%	80%	100%
OON Coinsurance	60%	60%	80%	60%	60%	80%	60%	60%	80%
PCP Office Visit	$25	$20	$25	$25	$20	$25	$25	$20	$25
SPC Office Visit	$25	$20	$0	$25	$20	$0	$25	$20	$0
Inpatient Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Outpatient Surgery Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Emergency Room Copay	$250	Deductible	Deductible	$250	Deductible	Deductible	$250	Deductible	Deductible
Pharmacy Deductible	$250	$0	$0	$250	$0	$0	$250	$0	$0
Retail Generic	$15	$10	$10	$15	$10	$10	$15	$10	$10
Retail Preferred	$50	$25	$30	$50	$25	$30	$50	$25	$30
Retail Non-Preferred	$50	$40	$45	$50	$40	$45	$50	$40	$45

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

Table 14: Lowest-Cost Private Comprehensive PPO Health Insurance Products - 2007-2009 (continued from previous page)

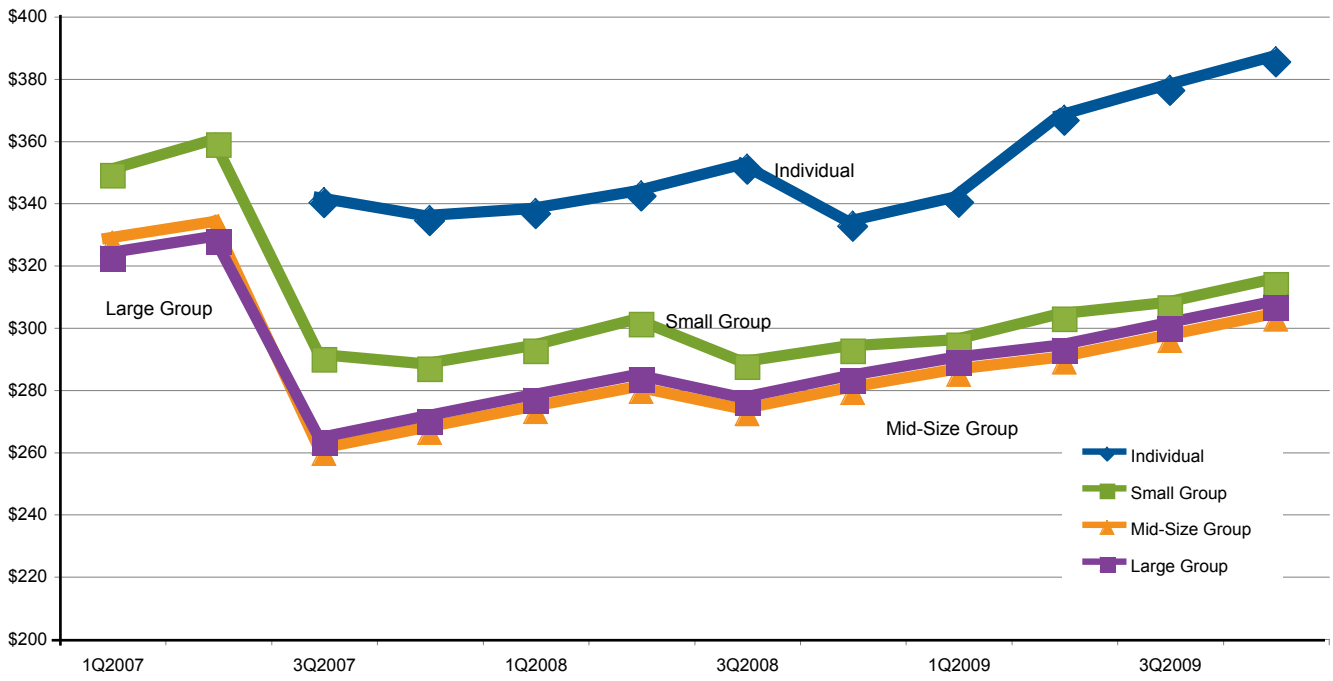
Small Group	2007 Minimum Product	2007 Median Product	2007 Maximum Product	2008 Minimum Product	2008 Median Product	2008 Maximum Product	2009 Minimum Product	2009 Median Product	2009 Maximum Product
Actuarial Value	0.514	0.524	0.746	0.514	0.524	0.712	0.514	0.524	0.712
Deductible	$2,000	$3,000	$1,000	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000
Coinsurance	80%	80%	100%	80%	80%	100%	80%	80%	100%
OON Coinsurance	60%	60%	80%	60%	60%	80%	60%	60%	80%
PCP Office Visit	$25	$20	$25	$25	$20	$25	$25	$20	$25
SPC Office Visit	$25	$20	$25	$25	$20	$0	$25	$20	$0
Inpatient Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Outpatient Surgery Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Emergency Room Copay	$250	Deductible	$100	$250	Deductible	Deductible	$250	Deductible	Deductible
Pharmacy Deductible	$250	$0	$250	$250	$0	$0	$250	$0	$0
Retail Generic	$15	$10	$10	$15	$10	$10	$15	$10	$10
Retail Preferred	$50	$25	$30	$50	$25	$30	$50	$25	$30
Retail Non-Preferred	$50	$40	$45	$50	$40	$45	$50	$40	$45
Mid-Size Group	**2007 Minimum Product**	**2007 Median Product**	**2007 Maximum Product**	**2008 Minimum Product**	**2008 Median Product**	**2008 Maximum Product**	**2009 Minimum Product**	**2009 Median Product**	**2009 Maximum Product**
Actuarial Value	0.514	0.524	0.646	0.514	0.524	0.646	0.514	0.524	0.646
Deductible	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000
Coinsurance	80%	80%	100%	80%	80%	100%	80%	80%	100%
OON Coinsurance	60%	60%	80%	60%	60%	80%	60%	60%	80%
PCP Office Visit	$25	$20	$50	$25	$20	$50	$25	$20	$50
SPC Office Visit	$25	$20	$50	$25	$20	$50	$25	$20	$50
Inpatient Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Outpatient Surgery Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Emergency Room Copay	$250	Deductible	$200	$250	Deductible	$200	$250	Deductible	$200
Pharmacy Deductible	$250	$0	$250	$250	$0	$250	$250	$0	$250
Retail Generic	$15	$10	$15	$15	$10	$15	$15	$10	$15
Retail Preferred	50%	$25	$30	50%	$25	$30	50%	$25	$30
Retail Non-Preferred	50%	$40	$50	50%	$40	$50	50%	$40	$50
Large Group	**2007 Minimum Product**	**2007 Median Product**	**2007 Maximum Product**	**2008 Minimum Product**	**2008 Median Product**	**2008 Maximum Product**	**2009 Minimum Product**	**2009 Median Product**	**2009 Maximum Product**
Actuarial Value	0.514	0.524	0.646	0.514	0.524	0.646	0.514	0.524	0.646
Deductible	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000	$2,000	$3,000	$2,000
Coinsurance	80%	80%	100%	80%	80%	100%	80%	80%	100%
OON Coinsurance	60%	60%	80%	60%	60%	80%	60%	60%	80%
PCP Office Visit	$25	$20	$50	$25	$20	$50	$25	$20	$50
SPC Office Visit	$25	$20	$50	$25	$20	$50	$25	$20	$50
Inpatient Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Outpatient Surgery Copay	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible	Deductible
Emergency Room Copay	$250	Deductible	$200	$250	Deductible	$200	$250	Deductible	$200
Pharmacy Deductible	$250	$0	$250	$250	$0	$250	$250	$0	$250
Retail Generic	$15	$10	$15	$15	$10	$15	$15	$10	$15
Retail Preferred	50%	$25	$30	50%	$25	$30	50%	$25	$30
Retail Non-Preferred	50%	$40	$50	50%	$40	$50	50%	$40	$50

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: The minimum, median, and maximum are determined by the actuarial value. The cost-sharing features shown are for the plan identified as having the minimum, median, and maximum actuarial value, respectively.

- The Massachusetts health care reform law requires residents to maintain minimum creditable coverage (MCC). In 2007 through 2009, most of the lowest-cost options meeting existing MCC requirements had a $2,000 deductible, the maximum allowable under MCC requirements if the plan is not eligible for a health savings account.[31]
- The lowest-cost small group HMO premium fell markedly in July 2007, when carriers introduced new low-cost products in the newly merged market (Figure J). These new products were introduced as Bronze coverage products made available to individuals through the Commonwealth Health Insurance Connector Authority's Commonwealth Choice program and some may have been introduced for other strategic reasons. Commonwealth Choice product offerings are made available both through the Connector and through the carriers' other merged market distribution channels for individuals and small employers.[32]

Figure J: Median Monthly Premiums for the Lowest-Cost Single Coverage HMO by Insurance Market Sector, 2007-2009



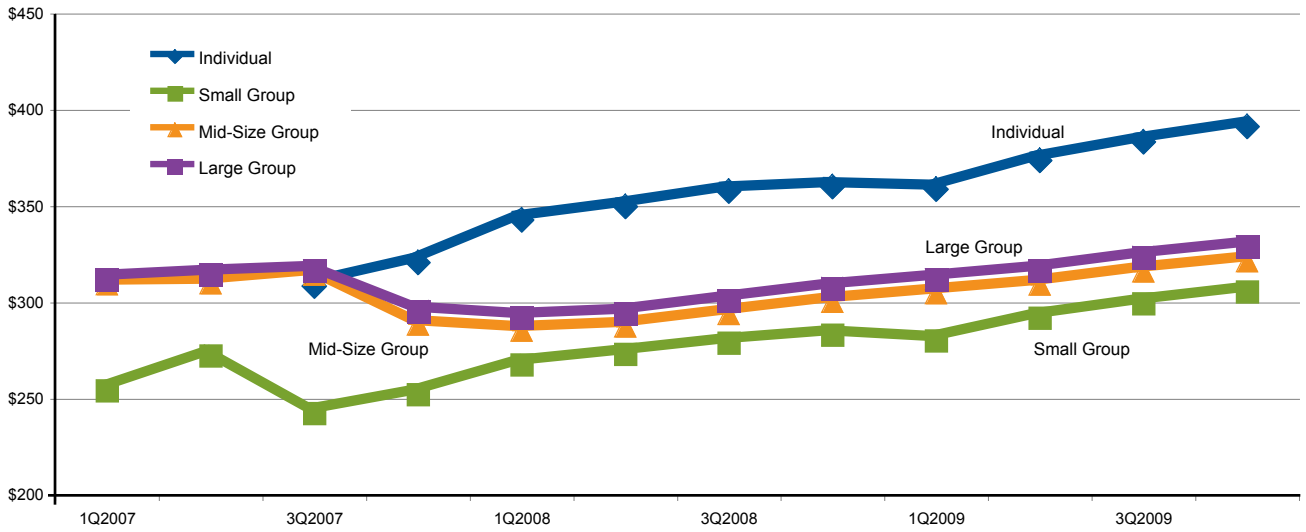
Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

31 Carriers were asked to limit their responses to questions about product offerings to those that would have met the 2010 MCC requirements.

32 Typically these new low-cost products were made available to larger groups as well.

- Because the lowest-cost PPO products generally did not change over the study period, the increase in median lowest-cost PPO premiums reflects the premium trend for those plans. In 2009, premiums for the lowest-cost PPO products were about 7 percent higher than in 2008 (Figure K).

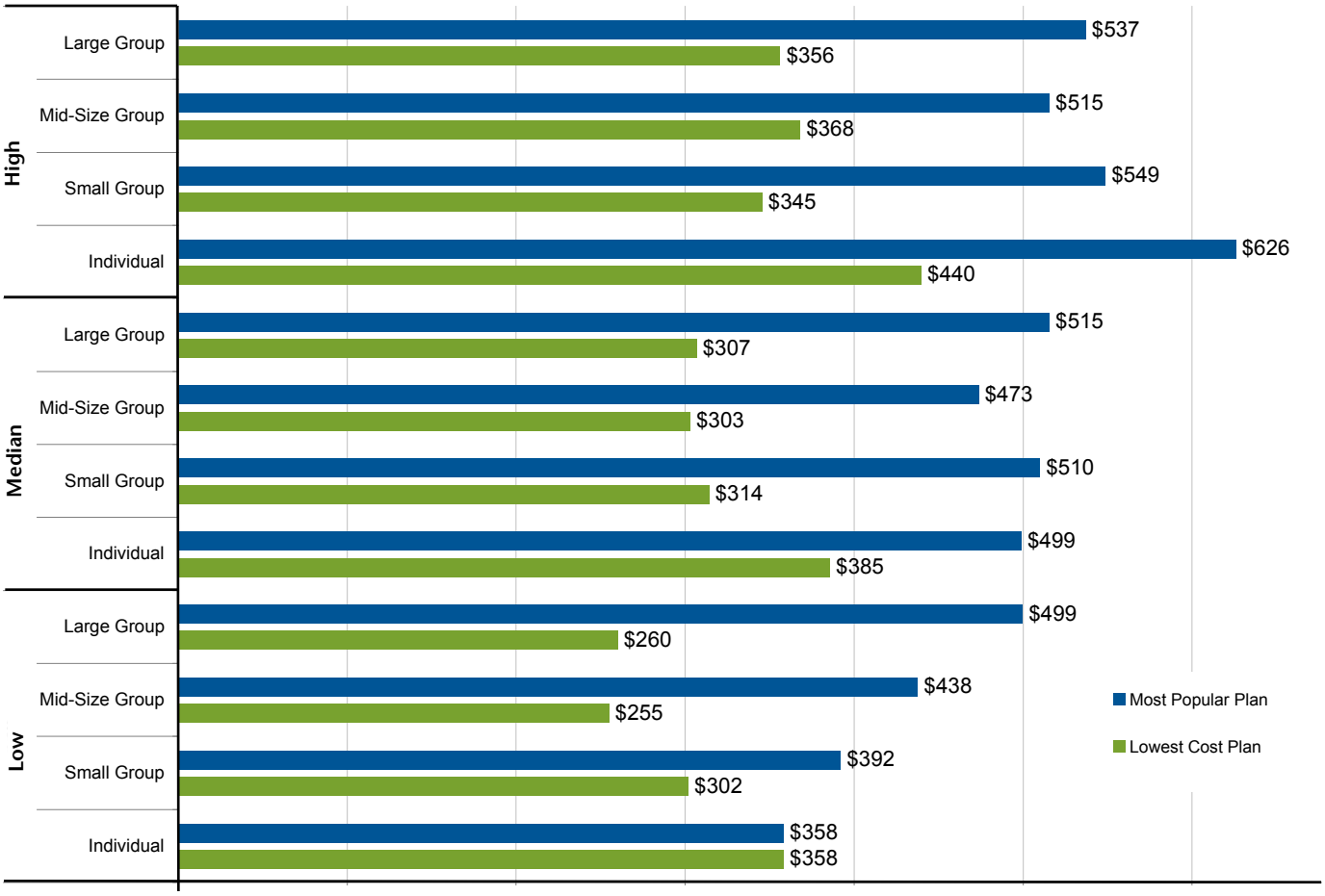
Figure K: Median Monthly Premiums for the Lowest-Cost Single Coverage PPO by Insurance Market Sector, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- In each group insurance market sector (small, mid-size, or large), the lowest-cost HMO plan was not the most popular HMO plan (Figure L). Only for HMOs in the individual market sector (Figure L) and PPOs for the mid-size group market sector (Figure M) were any carriers' lowest-cost plans also their most popular plans.

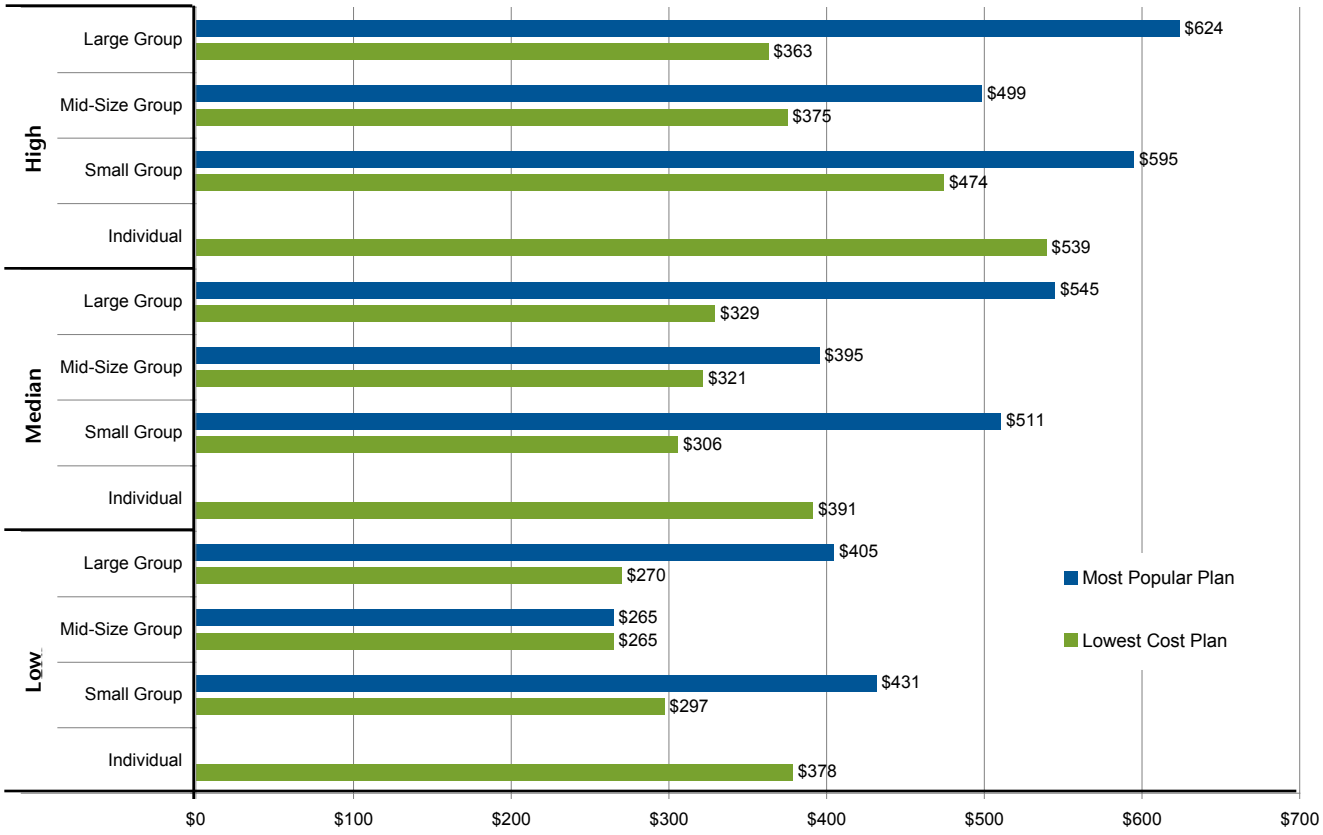
Figure L: Single Premiums for the Lowest-Cost HMO Plan and Most Popular HMO Plan: 4Q2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: "Low" represents the carrier with the lowest premium for their lowest-cost plan, and "High" represents the carrier with the highest premium for their lowest-cost plan among carriers in the study.

Figure M: Single Premiums for the Lowest-Cost PPO Plan and Most Popular PPO Plan: 4Q2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: "Low" represents the carrier with the lowest premium for their lowest cost-plan, and "High" represents the carrier with the highest premium for their lowest-cost plan among carriers in the study. Most popular PPO is not shown for the individual market sector because too few carriers reported data.

C. Expense Components of Premium

In 2009, across all insured market sectors, carriers used approximately 91 percent of premiums to pay for medical services and supplies on behalf of members. This proportion is referred to as the medical loss ratio. The remaining nine percent of premium, referred to as retention, is the amount available for carriers to fund non-medical, administrative expenses and contributions to surplus or profit.

Massachusetts health care reform merged the individual and small group markets and limited the difference in premiums that carriers can charge to individuals and small groups. Because individuals are more expensive to insure than small groups, some carriers have charged higher premiums to small groups to offset the higher cost of insuring individuals.[33] The extent to which small group premiums subsidize individuals depends on each carrier's individual claims experience and the size of the carrier's individual enrollment relative to its small group enrollment.

1. Historical Administrative Expenses and Medical Loss Ratios[34]

- From 2007 to 2009, the medical loss ratio calculated across all insured market sectors increased from 87.9 percent to 90.6 percent (Table 15).

Table 15: Premium, Claims, and Loss Ratios in Private Comprehensive Health Insurance Products, 2007-2009

	2007			2008			2009		
	Premiums (billions)	Claims (billions)	Loss Ratio	Premiums (billions)	Claims (billions)	Loss Ratio	Premiums (billions)	Claims (billions)	Loss Ratio
Individual Pre-Merger Products	$0.2	$0.2	96.0%	$0.1	$0.1	95.2%	$0.0	$0.0	103.1%
Individual Post-Merger Products	$0.1	$0.1	105.6%	$0.2	$0.3	111.6%	$0.4	$0.4	108.9%
Individual Total	$0.3	$0.3	98.1%	$0.3	$0.4	107.1%	$0.4	$0.4	108.4%
Small Group	$2.9	$2.5	86.7%	$2.9	$2.5	86.5%	$2.8	$2.5	87.8%
Merged Market Total	$2.9	$2.6	87.1%	$3.2	$2.8	88.5%	$3.1	$2.8	90.1%
Mid-Size Group	$3.2	$2.8	86.9%	$3.3	$2.9	87.7%	$3.4	$3.0	89.9%
Large Group	$2.5	$2.2	89.5%	$2.4	$2.2	89.4%	$2.4	$2.2	92.0%
Total	$8.9	$7.8	87.9%	$9.0	$8.0	88.5%	$8.9	$8.1	90.6%

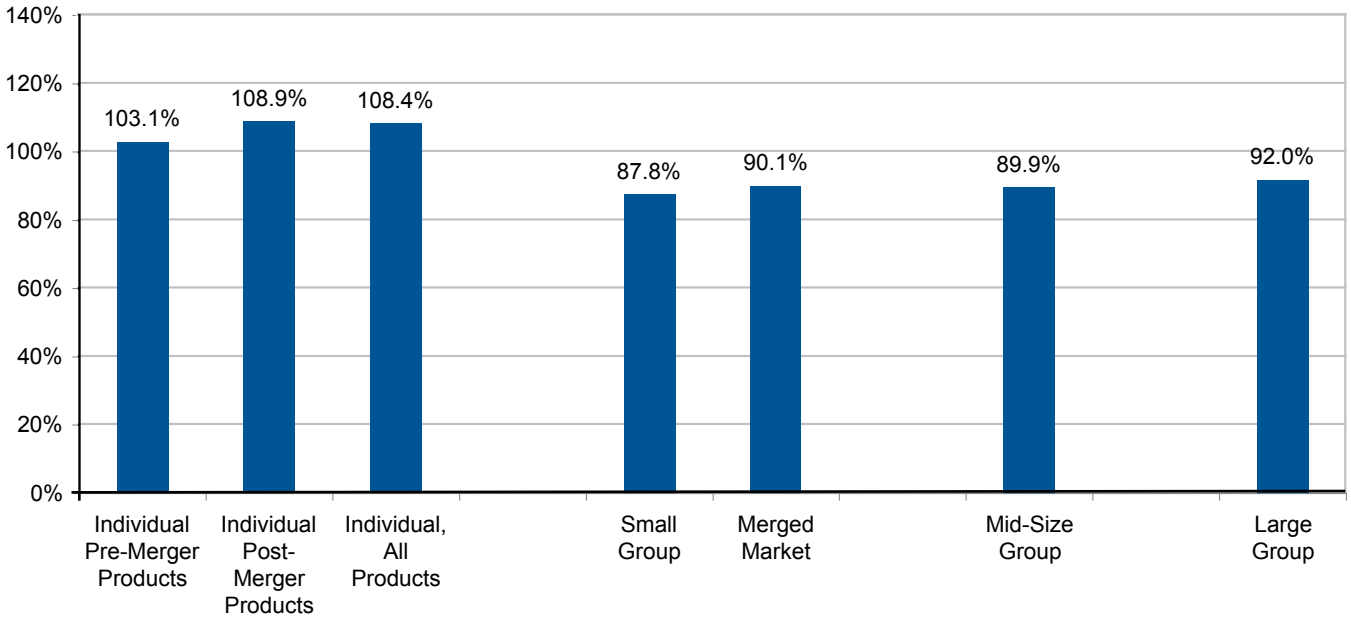
Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

33 Subsequent to Massachusetts health care reform, there is evidence that some individuals have purchased coverage for short periods of time, possibly in anticipation of using medical services, contributing to increased cost for individuals in the merged market. Available at: http://www.mass.gov/Eoca/docs/doi/Companies/adverse_selection_report.pdf, accessed 5/22/2011. Chapter 288 of the Acts of 2010 introduced an open enrollment period to mitigate the ability of individuals to purchase coverage only when services are needed.

34 For purposes of this report, medical loss ratio is defined as incurred claims divided by earned premium. This differs from the medical loss ratio calculation defined by federal reform and Massachusetts Chapter 288 of the Acts of 2010, which allow certain adjustments to be applied to the loss ratio, including adjustments for quality improvement expenses, taxes and fees, and credibility. Since the data request for this report was submitted prior to finalization of that calculation, the more traditional loss ratio calculation was utilized.

- While the post-merger individual market sector[35] has shown an aggregate medical loss ratio above 100 percent in all years, it declined from 112 percent in 2008 to 109 percent in 2009. The medical loss ratio in pre-merger individual products increased to 103 percent (Figure N). Because the pre-merger individual market sector is a closed block of business, enrollment in that market sector continues to decline, as evidenced by declining premium volume (Table 15).

Figure N: Loss Ratios by Insurance Market Sector, 2009



Source: Oliver Wyman analysis of data provided by Massachusetts carriers for resident and non-resident insured lives.
Note: Figures shown are averages weighted by carrier premium.

35 Individuals who had coverage when the individual and small group markets were merged were allowed to maintain coverage in their existing products. These products are referred to as "pre-merger" products, while individual products purchased after the merger are referred to as "post-merger" products.

- Total administrative expenses pmpm decreased slightly by 0.5 percent when calculated across all comprehensive major medical business from 2008 to 2009 (Table 16). From 2007 to 2009, total retention percentages decreased across all market sectors (Table 17). The larger decrease in retention is consistent with declining contributions to surplus or profit.

Table 16: Administrative Expenses Per Member Per Month for Comprehensive Major Medical Products, 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average, 2002 - 2010
BCBS of MA	$26	$32	$31	$47	$57	$59	$57	$54	$51	$37
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	$31	$33	$36	$39	$40	$40	$36
BCBS of MA Consolidated	$26	$32	$31	$34	$38	$40	$43	$43	$42	$37
CIGNA Healthcare of Massachusetts Inc	$31	$29	$38	$35	$43	$46	$51	$80	$100	$34
Connecticare of Massachusetts Inc	$25	$29	$33	$52	$52	$52	$59	$58	$69	$45
Fallon Community Health Plan Inc	$15	$19	$19	$24	$26	$30	$32	$34	$38	$26
Harvard Pilgrim Health Care Inc	$25	$25	$34	$47	$49	$45	$41	$42	$40	$38
Health New England Inc	$27	$29	$31	$33	$36	$36	$38	$40	$39	$34
Neighborhood Health Plan Inc	$16	$19	$24	$25	$27	$33	$32	$30	$28	$28
Tufts Associated HMO Inc	$22	$25	$32	$39	$49	$61	$54	$48	$56	$39
United Healthcare of New England Inc	$32	$36	$18	$20	$22	$25	$22	$24	$26	$26
Total	**$24**	**$28**	**$31**	**$36**	**$40**	**$43**	**$42**	**$42**	**$43**	**$36**

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Average Annual
BCBS of MA	23.3%	-1.4%	49.7%	21.5%	3.7%	-2.9%	-5.6%	-6.8%	8.8%
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	8.8%	6.7%	8.8%	3.6%	0.3%	5.6%
BCBS of MA Consolidated	23.3%	-1.4%	8.3%	12.2%	6.1%	5.5%	0.6%	-1.4%	6.4%
CIGNA Healthcare of Massachusetts Inc	-6.3%	30.8%	-9.2%	22.8%	8.6%	10.9%	56.7%	24.8%	15.7%
Connecticare of Massachusetts Inc	17.1%	12.8%	56.9%	0.5%	-0.9%	13.3%	-1.0%	18.3%	13.4%
Fallon Community Health Plan Inc	21.6%	1.6%	28.4%	7.1%	15.6%	5.6%	6.2%	11.7%	11.9%
Harvard Pilgrim Health Care Inc	2.0%	36.3%	37.2%	3.7%	-8.1%	-9.1%	3.6%	-6.1%	6.1%
Health New England Inc	6.1%	8.2%	8.5%	6.0%	0.8%	6.8%	5.5%	-3.2%	4.8%
Neighborhood Health Plan Inc	17.8%	28.5%	1.9%	10.5%	18.7%	-0.6%	-7.2%	-5.3%	7.4%
Tufts Associated HMO Inc	16.3%	28.8%	21.3%	26.0%	23.9%	-11.0%	-10.8%	15.7%	12.7%
United Healthcare of New England Inc	14.0%	-49.9%	11.6%	9.0%	11.9%	-9.9%	7.4%	6.7%	-2.7%
Total	**15.1%**	**10.5%**	**17.2%**	**11.1%**	**5.6%**	**-0.3%**	**-0.5%**	**1.0%**	**7.3%**

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.
Note: Trend rates were calculated from un-rounded pmpm amounts (not shown).

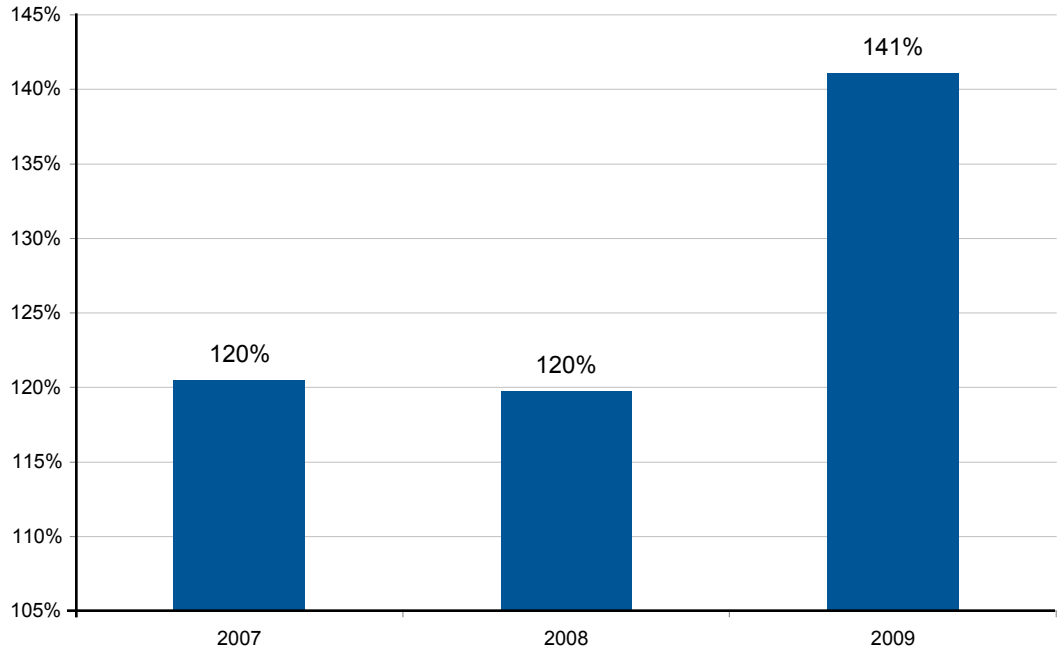
Table 17: Estimated Average Annual Growth in Retention PMPM by Insurance Market Sector, 2007-2009

	2007-2008	2008-2009	Average Annual Growth 2007 - 2009
Small Group	7.2%	-7.2%	-0.3%
Mid-Size Group	-1.3%	-13.1%	-7.4%
Large Group	7.8%	-21.2%	-7.8%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

- Small groups paid a larger pmpm amount towards retention than did large groups. In 2007 and 2008, small groups paid 120% of what large groups did on a pmpm basis towards non-medical spending. In 2009, that figure rose to 141%. This is based on reported results, and does not necessarily reflect what carriers built into pricing (Figure O).

Figure O: Small Group Retention Per Member Per Month as a Percent of Large Group Retention per Member per Month, 2007-2009



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives

2. Carrier Pricing[36]

- In general, carriers' pricing reflected greater retention charges—that is, a greater difference between the premium charged and the expected claims expense—for small and mid-size groups than for large groups as a percentage of premiums in April 2010. However, retention charges represented a slightly smaller percentage of premiums for small groups than for mid-size groups (Table 18). For small groups, this likely reflects the more limited rate increases that the Division of Insurance ultimately approved in the merged market, as discussed in Section D.

Table 18: Decomposition of Retention Components Used in Pricing Private Comprehensive Health Insurance Products, April 2010

	Low retention	Average retention*	High retention
Retention %			
Merged Individual and Small Group	9.4%	11.1%	25.0%
Mid-Size Group	10.2%	11.6%	19.8%
Large Group	8.0%	9.7%	19.8%
Contribution to Surplus/Profit as Percent of Total Premium			
Merged Individual and Small Group	-0.3%	2.3%	8.5%
Mid-Size Group	1.0%	3.5%	4.4%
Large Group	0.6%	2.0%	4.4%
Commissions as Percent of Total Premium			
Merged Individual and Small Group	1.0%	2.1%	5.0%
Mid-Size Group	1.4%	1.9%	5.0%
Large Group	0.4%	1.2%	5.0%
General Administrative Expense as Percent of Total Premium			
Merged Individual and Small Group	3.1%	5.6%	10.5%
Mid-Size Group	3.4%	5.0%	10.5%
Large Group	3.7%	5.1%	10.5%
Premium Tax as Percent of Total Premium			
Merged Individual and Small Group	0.0%	0.2%	2.3%
Mid-Size Group	0.0%	0.4%	2.3%
Large Group	0.0%	0.6%	2.3%
Medical Management Expense as Percent of Total Premium			
Merged Individual and Small Group	0.4%	0.9%	1.5%
Mid-Size Group	0.6%	0.8%	1.5%
Large Group	0.6%	0.8%	1.5%

Source: Oliver Wyman analysis of rating data for insurance carriers in Massachusetts.

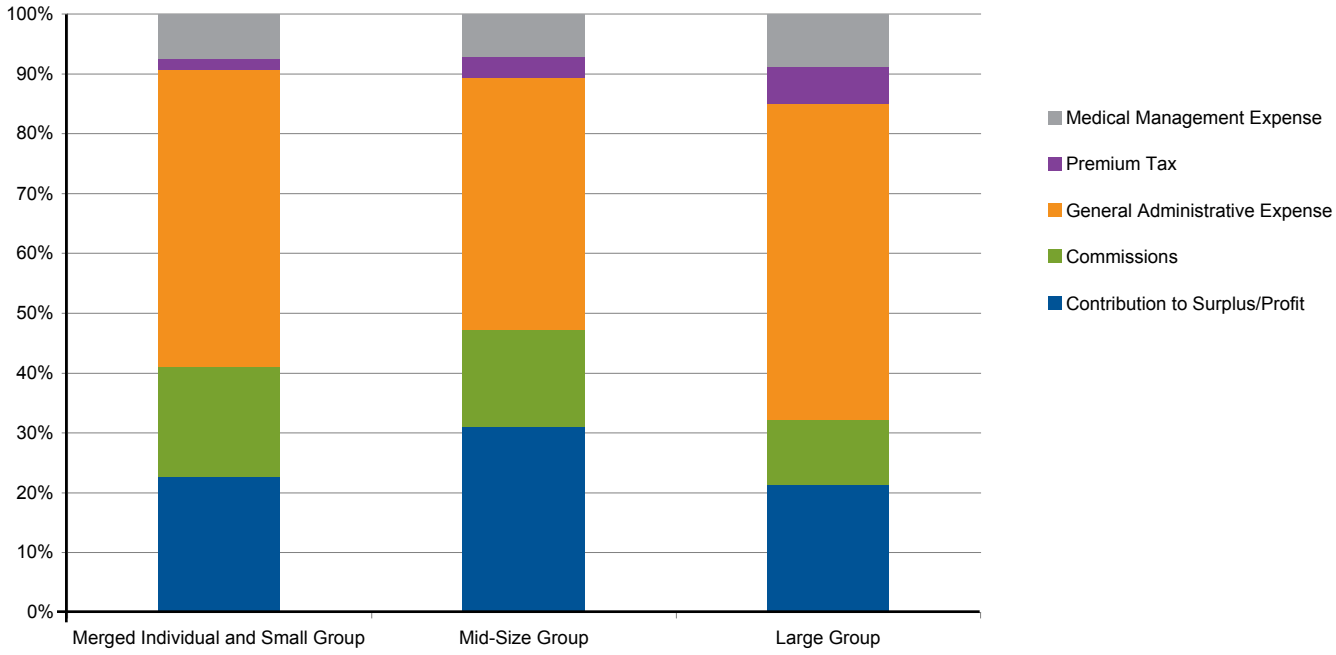
Note: Retention is defined as the portion of premium maintained by the carriers to pay for administrative expenses and contribution to surplus or profit. Retention is equal to 1 minus the loss ratio. While the sum of contribution to surplus or profit, commissions, and general administrative expense is equal to the total retention for a given carrier, the low and high amounts shown are calculated separately for each component across the carriers and, therefore, do not sum to the total.

* The average shown is weighted by membership.

36 Carriers provided their pricing retention and components as a percentage of premium and as a pmpm amount. A more detailed explanation is provided in the "Methodology and Process" section of this report.

- Contribution to surplus (for not-for-profit companies) or profit (for "for-profit" companies) accounted for roughly 25 percent of retention charges built into pricing in all insured market sectors in April 2010. Commissions accounted for 15 percent, general administrative expense 50 percent, premium tax 5 percent, and medical management expense 5 percent (Figure P).[37]

Figure P: Decomposition of Average[a] Retention into Components Used in Pricing Private Comprehensive Health Insurance Products, April 2010



Source: Oliver Wyman analysis of rating data for insurance carriers in Massachusetts.

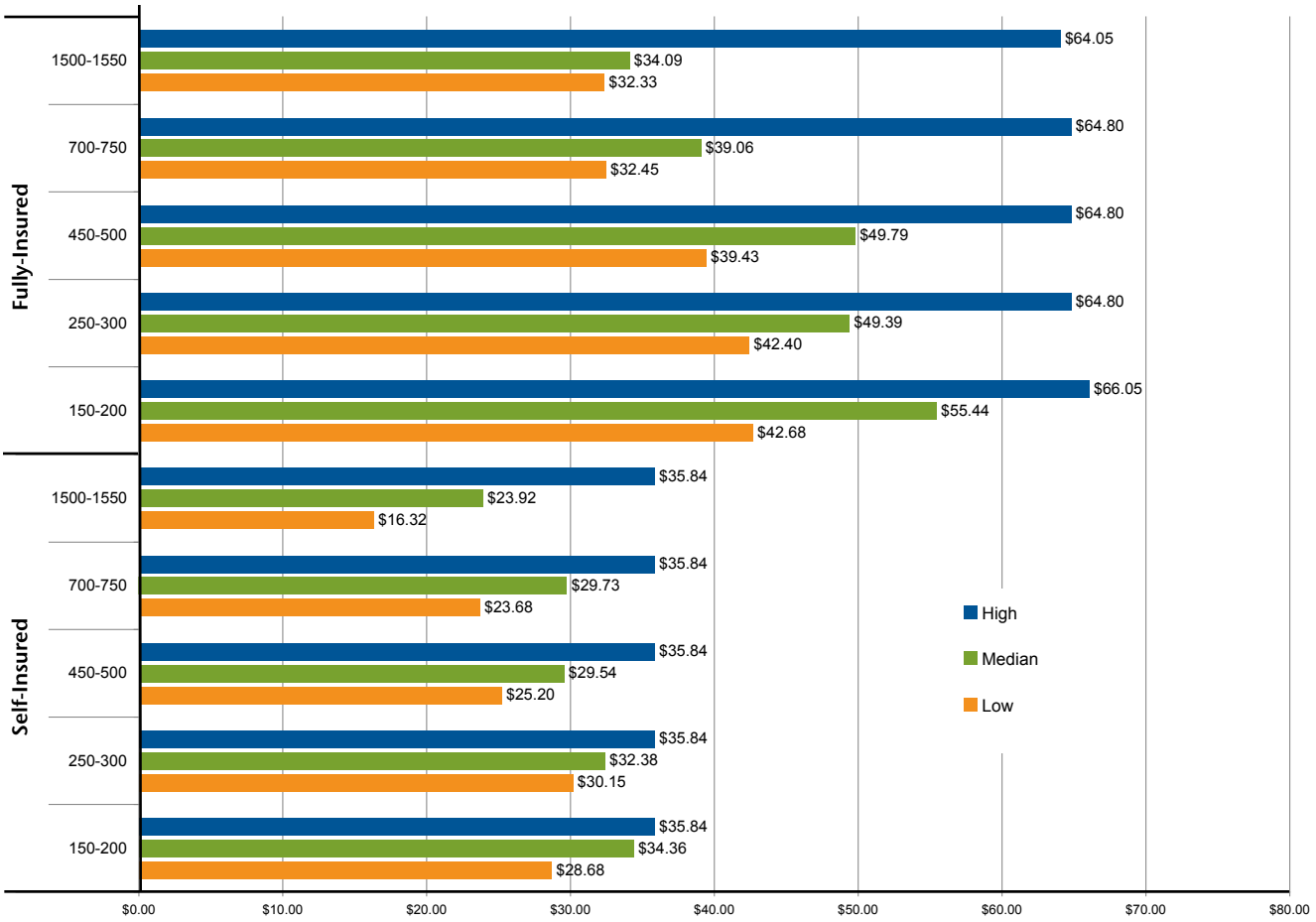
Note: Retention is defined as the portion of premium maintained by the carriers to pay for administrative expenses and contribution to surplus or profit. Retention is equal to 1 minus the loss ratio.

[a] The average shown is weighted by membership.

37 Some carriers include some medical management expenses in the claims estimate when pricing products. Oliver Wyman restated the reported retention amounts to include those expenses for this analysis consistently across carriers.

- In April 2010, retention charges in the premiums charged to fully-insured groups were roughly 50 percent higher than the fees charged to self-insured groups of the same size.[38] Median self-insured fees were approximately $30 pmpm for a group with 500 enrolled employees, compared with retention of approximately $50 pmpm for a fully insured group of the same size (Figure Q). This is partly due to charges not applicable to self-insured groups or charges for services available to insured groups but which many self-insured groups may not provide (e.g., certain disease management systems).

Figure Q: Fully-Insured Retentions PMPM and Self-Insured Fees PMPM, April 2010



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

38 Limitations in the data provided prohibit a decomposition of self-insured fees into the component parts.

D. Recent Experience and Future Changes

In 2010, material changes occurred in the health insurance markets in Massachusetts and nationwide. Federal health care reform (the Patient Protection and Affordable Care Act or the ACA) was signed into law in 2010, just after the 2007-2009 time period reflected in the data requested for this study. The ACA's early provisions, which expanded dependent eligibility and established some coverage requirements, took effect with plan renewals on or after September 23, 2010. However, since Massachusetts health care reform already included expanded eligibility for dependents and requirements for minimum creditable coverage, these federal provisions may have less impact in Massachusetts than in other states.

Regulation of merged market premiums in Massachusetts also changed significantly in 2010. Emergency regulations were promulgated by the Massachusetts Division of Insurance (DOI) related to HMO rate filing requirements. The regulation required health insurance carriers to file proposed rates 30 days prior to their effective date with documentation justifying the necessity of any requested increases. This regulation became effective for rates proposed to take effect on or after April 1, 2010. On April 1, 2010, the Commissioner of Insurance disapproved 235 of 274 proposed rate increases.[39] Subsequently, most of the major carriers in the market settled with the Division of Insurance for rate increases less than those originally proposed.

Given the scope of this report's analysis, it was not possible to directly attribute insurance market and premium changes to any one change in federal or state law. It also remains too early to determine the full impact of the DOI's increased scrutiny of rates.

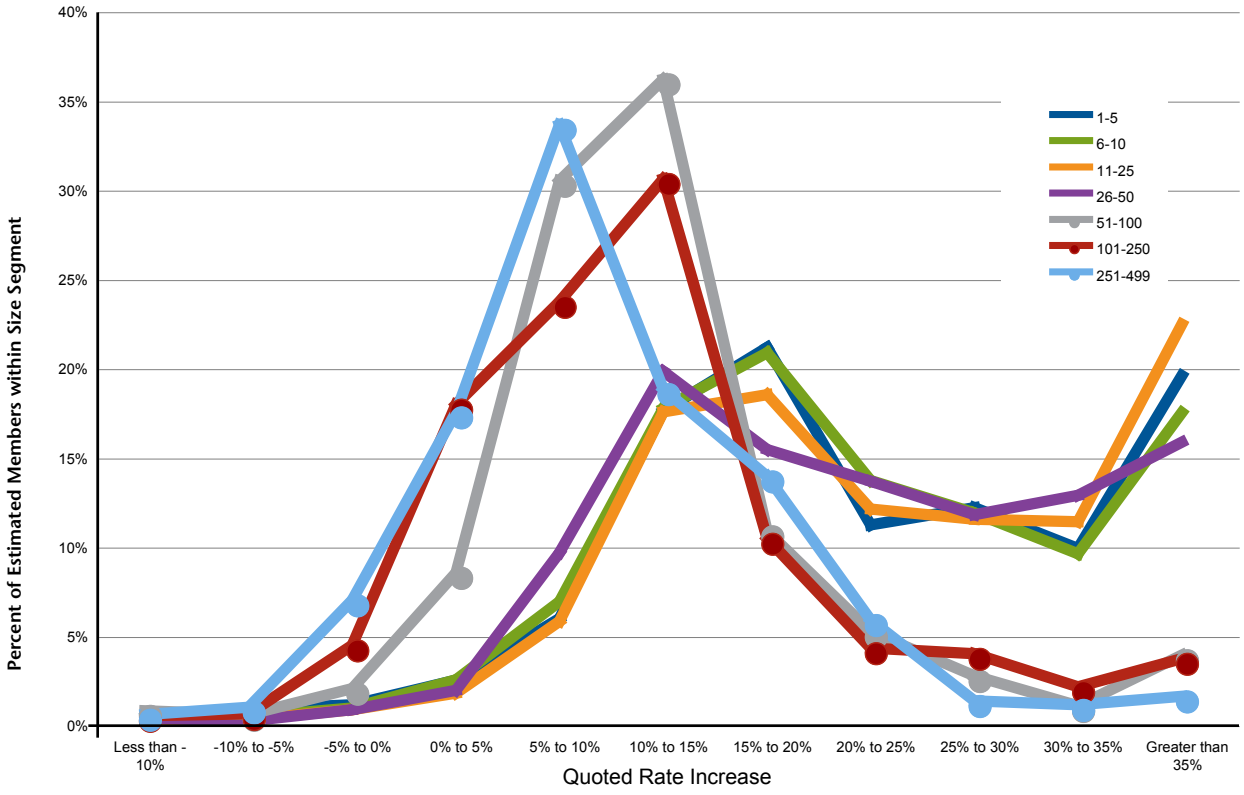
However, preliminary findings on first quarter 2010 premiums[40] and calendar year 2010 medical loss ratios are included below.

- Quoted rates for small groups rose sharply in the first quarter of 2010, just prior to DOI's rate disapprovals. Roughly 15 to 20 percent of members in the small group market renewing in the first quarter received quoted rate increases of 35 percent or more (Figure R). Over half received a quoted rate increase of 20 percent or more. (Data was not available to indicate the cause of this result.) These increases would have been put into place just prior to the expanded rate review authority granted to the Division of Insurance.

39 The Boston Globe, *Mass. rejects proposed health care premium hikes*, April 1, 2010. Available at: http://www.boston.com/business/ticker/2010/04/mass_rejects_re.html, accessed 3/24/2011.

40 This was the last calendar quarter prior to the effective date of emergency regulations that increased the rate review authority of the Massachusetts Division of Insurance.

Figure R: Distribution of Enrollment by Quoted Rate Increase, Small and Mid-Size Group Sectors, 1Q2010



Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.
Note: Enrollment is measured as estimated members.

- The significant increase in quoted rates for small groups (Figure R) may be due to changes in demographics of enrolled employees. For small groups, each enrolled individual represents a significant percentage of the total group, unlike in a larger group where the risk of any one individual can be spread more broadly.[41]

41 DHCFP's prior report (*Massachusetts Private Health Insurance Premium Trends 2006-2008*) provided examples of the extent to which group size factors and age rating factors can dramatically influence small group rate increases. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/cost_trends_files/part2_premium_levels_and_trends.pdf, accessed 5/22/2011.

The group size factor permitted in the merged market can have a significant impact on premium volatility. For example – take a company with six employees enrolled in the employer's health insurance, and average small group premium increases of 6.0%. If one of those employees of average age leaves the group, resulting in a group of five employees, the premium rate increase would be 15.8%. On the other hand, for a company with 20 employees who had a similar proportion of employees of average age leave the group (i.e., three employees) leaving a group of 17 employees, the premium rate increase would be only 6.1%.

The age rating permitted in the merged market can also have a significant impact on premium growth. For example – take a company with 20 employees enrolled in the employer's health insurance offering. If from one year to the next, none of the firm's employees age into an older age rating band (typically insurers set age rating factors based on five-year increments) the premium increase would be 6.0%. However, and what is more likely, if that same group of 20 employees were to have 6 of its employees age into the next five-year age band, the premium increase charged to the employer would be 10.7%.

- In 2009, the carriers shown in Table 19 incurred claims and administrative expenses for comprehensive major medical products equal to 101.6 percent of premium, equating to a 1.6 percent underwriting loss. In calendar year 2010, claims and administrative expenses incurred represented 100.0 percent of premium, or a break-even underwriting result.

Table 19: Loss Ratios for Comprehensive Major Medical Products, 2002-2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average, 2002 - 2010
BCBS of MA	85.1%	82.7%	84.7%	81.7%	80.7%	82.2%	86.2%	84.7%	85.2%	83.9%
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	88.5%	89.9%	91.0%	90.8%	92.9%	91.8%	90.9%
BCBS of MA Consolidated	85.1%	82.7%	84.7%	87.0%	87.9%	89.0%	89.8%	91.1%	90.4%	87.9%
CIGNA Healthcare of Massachusetts Inc	86.6%	91.3%	89.2%	74.3%	84.8%	88.6%	89.4%	75.7%	92.0%	87.1%
Connecticare of Massachusetts Inc	86.9%	83.3%	83.5%	74.6%	78.1%	79.7%	74.5%	77.2%	69.2%	78.7%
Fallon Community Health Plan Inc	90.0%	89.2%	89.8%	87.3%	90.2%	91.8%	90.9%	95.1%	91.2%	91.0%
Harvard Pilgrim Health Care Inc	86.9%	88.3%	86.7%	82.8%	84.4%	86.6%	87.4%	88.8%	87.8%	86.6%
Health New England Inc	87.9%	86.5%	86.2%	83.5%	85.2%	87.3%	87.1%	87.5%	86.7%	86.5%
Neighborhood Health Plan Inc	90.7%	85.4%	85.1%	90.9%	94.2%	96.0%	86.3%	91.3%	94.6%	91.3%
Tufts Associated HMO Inc	89.7%	88.3%	89.8%	85.7%	84.7%	84.4%	87.1%	89.7%	87.0%	87.6%
United Healthcare of New England Inc	79.4%	83.9%	74.8%	77.9%	75.1%	79.1%	77.9%	75.7%	82.4%	79.4%
Total	86.6%	85.7%	86.3%	85.6%	86.7%	88.0%	88.7%	90.5%	89.4%	87.6%

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements

- Medical loss ratios across all market segments combined, as reported in carrier financial statements, *decreased* from 90.5 percent in 2009 to 89.4 percent in 2010, indicating that carriers used a lower percentage of premiums in 2010 to pay for medical services and supplies on behalf of members. Similarly, carriers had a greater proportion of premium available in 2010 to fund non-medical, administrative expenses and contributions to surplus or profit. The decrease in medical loss ratio from 2009 to 2010 appears to be the result of a slowing trend in medical expenditures, both locally and nationally. While medical claims expenditures annually increased between 6.3% and 11.7% from 2002 to 2009, it increased by just 3.7% from 2009 to 2010 (Table 20).[42]

Table 20: Claim Expenditures* Per Member Per Month for Comprehensive Major Medical Products, 2002-2010: (continued on next page)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average, 2002 - 2010
BCBS of MA	$196	$216	$240	$274	$290	$314	$337	$344	$347	$247
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	$263	$289	$313	$332	$350	$368	$317
BCBS of MA Consolidated	$196	$216	$240	$265	$289	$314	$333	$349	$363	$285
CIGNA Healthcare of Massachusetts Inc	$198	$236	$295	$295	$274	$317	$369	$360	$449	$237
Connecticare of Massachusetts Inc	$171	$190	$214	$205	$226	$235	$235	$252	$239	$216
Fallon Community Health Plan Inc	$155	$178	$226	$250	$283	$310	$324	$358	$374	$271
Harvard Pilgrim Health Care Inc	$196	$222	$244	$260	$289	$318	$339	$363	$367	$281
Health New England Inc	$183	$204	$228	$237	$258	$280	$297	$311	$316	$258
Neighborhood Health Plan Inc	$188	$200	$227	$262	$302	$345	$327	$363	$382	$316
Tufts Associated HMO Inc	$192	$216	$255	$270	$284	$299	$322	$340	$348	$264
United Healthcare of New England Inc	$176	$199	$68	$90	$94	$103	$105	$105	$119	$123
Total	**$192**	**$214**	**$236**	**$257**	**$281**	**$306**	**$326**	**$346**	**$359**	**$274**

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.

Note: Trend rates were calculated from un-rounded pmpm amounts.

* Medical Expenses reflect carrier payments and do not include cost-sharing amounts, so changes in the rate of increase may be the result of benefit buy-down.

42 However, it is not yet possible to determine if a decline in growth of medical claims expenses may impact total health care spending. Medical claims expenditures reflect carrier payments and do not include cost-sharing amounts, so changes in the rate of increase may be the result of benefit buy-down.

Table 20: Claim Expenditures* Per Member Per Month for Comprehensive Major Medical Products, 2002-2010: (continued from previous page)

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Average Annual
BCBS of MA	10.2%	11.2%	14.5%	5.6%	8.4%	7.2%	2.3%	0.9%	7.4%
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	9.9%	8.6%	5.9%	5.3%	5.1%	7.0%
BCBS of MA Consolidated	10.2%	11.2%	10.6%	9.0%	8.5%	6.2%	4.7%	4.3%	8.0%
CIGNA Healthcare of Massachusetts Inc	19.4%	25.1%	-0.2%	-7.1%	15.8%	16.5%	-2.7%	24.8%	10.8%
Connecticare of Massachusetts Inc	11.0%	12.5%	-4.2%	10.2%	4.3%	-0.2%	7.5%	-5.5%	4.2%
Fallon Community Health Plan Inc	14.8%	26.7%	10.6%	13.1%	9.8%	4.4%	10.4%	4.4%	11.6%
Harvard Pilgrim Health Care Inc	13.0%	10.0%	6.7%	11.1%	9.8%	6.5%	7.1%	1.2%	8.1%
Health New England Inc	11.6%	11.3%	3.9%	9.3%	8.5%	5.8%	4.7%	1.8%	7.1%
Neighborhood Health Plan Inc	6.4%	13.8%	15.5%	15.1%	14.4%	-5.2%	11.0%	5.2%	9.3%
Tufts Associated HMO Inc	12.5%	18.0%	6.0%	5.4%	5.2%	7.6%	5.8%	2.4%	7.8%
United Healthcare of New England Inc	13.3%	-65.9%	31.8%	4.7%	9.7%	2.4%	-0.7%	13.6%	-4.8%
Total	**11.7%**	**10.0%**	**9.0%**	**9.6%**	**8.9%**	**6.3%**	**6.3%**	**3.7%**	**8.2%**

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.

Note: Trend rates were calculated from un-rounded pmpm amounts.

*Medical Expenses reflect carrier payments and do not include cost-sharing amounts, so changes in the rate of increase may be the result of benefit buy-down.

State legislation enacted in 2010 (Chapter 288 of the Acts of 2010)[43] implements additional reforms in the regulation of the merged market. Specifically, this legislation:

- Established two open enrollment periods for eligible individuals and their dependents during 2011, moving to an annual open enrollment period thereafter.
- Required the filing of merged market rates for approval by all carriers, including non-HMO plans.
- Established presumptive disapproval of merged market rates if the administrative expenses increase by more than the New England medical CPI, if a carrier's contribution to surplus exceeds 1.9 percent, or if the projected medical loss ratio is less than 88 percent in 2011 and 90 percent in 2012.[44]

In addition, beginning in July 2011, carriers in the Massachusetts merged market will be required to rate using one-year age bands if age is used as a rating factor. This requirement should reduce the variation in rate increases from year to year in the merged market by applying incremental changes each year to account for age rather than a large increase every five years. Newly mandated coverage for diagnosis and treatment of autism spectrum disorder as well as an expansion of the infertility mandate will also affect coverage provided in 2011.[45]

Although Chapter 288 of the Acts of 2010 created minimum medical loss ratio requirements that apply in 2011 and 2012, additional loss ratio requirements created under ACA will take effect in future years.

43 In 2010, the Legislature passed, and Governor Patrick signed into law, Chapter 288 of the Acts of 2010: *An Act to Promote Cost Containment, Transparency and Efficiency in the Provision of Quality Health Insurance for Individuals and Small Businesses*. Available at: http://www.malegislature.gov/Laws/SessionLaws/Acts/2010/Chapter288, accessed 5/22/2011.

44 Section 29 of Chapter 288 of the Acts of 2010, which establishes presumptive disapproval criteria, took effect on October 1, 2010. However, since the regulations implementing the new rate filing requirements were filed with the Secretary of the Commonwealth on March 18, 2011 for promulgation on April 1, 2011, the first effective date for which the requirements apply is July 1, 2011. The 1.9 percent contribution to surplus criteria is revised to 2.5 percent for carriers whose Risk Based Capital Ratio falls below 300 percent for the most recent four consecutive quarters. Section 30 takes effect on October 1, 2011 and revises the medical loss ratio for presumptive disapproval from 88 percent to 90 percent. Section 31 which takes effect on October 1, 2012 removes the presumptive disapproval criteria.

45 Expanded coverage for infertility became effective August 1, 2010. DHCFP estimated a cost impact of $0.56 pmpm in 2009, increasing to $0.74 pmpm by 2013. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/09/Infertility_Report.pdf, accessed 5/22/2011. Available at: http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter175/Section47H, accessed 4/25/2011.

The autism mandate became effective January 1, 2011. DHCFP estimated a cost impact of $1.11 pmpm in 2011, increasing to $2.27 pmpm by 2015. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/10/mb_autism.pdf, accessed 5/22/2011. Available at: http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter175/Section47AA, accessed 4/25/2011.

Methodology and Process

Overview

Oliver Wyman developed a data request that was reviewed by DHCFP and its consultants and forwarded to the participating carriers.[46] This request specified the content for premium, claims, membership, and pricing data. For this study, DHCFP requested that carriers provide data on their commercial medical products for all group sizes including individuals. Products that are specifically excluded from this study are: Medicare Advantage, Commonwealth Care, Medicaid, Medicare supplement, FEHBP, and non-medical (e.g., dental) lines of business.

Carriers that responded to the data request included:

- Blue Cross and Blue Shield of Massachusetts, Inc.
- Blue Cross and Blue Shield of Massachusetts HMO Blue, Inc.
- Fallon Community Health Plan, Inc.
- Fallon Health & Life Assurance Co.
- Harvard Pilgrim Health Care, Inc.
- Harvard Pilgrim Insurance Company, Inc.
- Neighborhood Health Plan, Inc.
- Tufts Associated Health Maintenance Organization, Inc. (d/b/a/ Tufts Health Plan)
- Tufts Insurance Co.
- Unicare Life & Health Insurance Co.
- United HealthCare of New England, Inc.

Oliver Wyman analyzed the data for each company separately. Because of data issues, some carriers are excluded from certain sections of the analysis. Unless otherwise noted, each analysis was conducted with a consistent set of carriers to ensure the comparability of results. Since all analyses include a large majority of the total covered members, it is not anticipated that this has a material effect on findings across sections.

46 Oliver Wyman prepared the information presented in this report for the sole use of the Massachusetts Division of Health Care Finance and Policy (DHCFP).

Beneficiaries

This section summarizes the distribution of members by market sector. For this analysis, DHCFP requested detailed membership data from the carriers for their fully insured business. For self-funded business, annual member months and average employer size were requested. The beneficiaries described in this section may reside inside or outside of Massachusetts. Most often beneficiaries are located outside of Massachusetts when they are covered by an employer that is located in Massachusetts. These out-of-state beneficiaries have been included in all sections of this report for consistency with the premium data which also includes out-of-state beneficiaries.

Most Popular Plan Analysis

Carriers provided DHCFP with their most popular HMO and PPO plans, based on membership counts, for each calendar quarter for each market sector. This quarterly data is used to determine the minimum, median, and maximum value plan in each calendar year. It is important to note that the most popular plan can be different in one market sector than another. Therefore, a portion of the difference in premiums for the most popular plan between market sectors can be attributed to differences in benefits.

An actuarial value was calculated for each of the plan designs provided. This was done by running each benefit design through a proprietary pricing model. The model was calibrated to reflect the average claim level of the market in 2009. Plan relativities were calculated by dividing each plan premium from the model by the plan premium for the richest plan reviewed.

To calculate the single and family premiums for the most popular plans, carriers provided the applicable base rates and rating factors used to generate a final premium rate. DHCFP created a sample census for each market sector that closely resembles the overall membership of the sector. For the individual market sector, age and gender representative of the average of a group of individuals were selected for analysis rather than basing the analysis on one age and gender. Because the sample census is different for each market sector, the premiums for the most popular plan differ by sector in part due to the differences in age, gender, and average contract size of the population. Among the three group market sectors, the populations are similar in average age and gender but do reflect a slighter higher average age/gender factor with increasing group size. The model populations also reflect the slightly higher average contract size for larger groups.

All market sectors were assumed to have an industry rating factor of 1.0, consistent with the average. Pre-merger individual products were excluded from this analysis. The premiums reflect the Boston metro region.[47]

47 The adjustment to Boston premiums is related to the most popular and lowest cost plan analyses only. Similar to the sample census for the age/gender distribution, this analysis assumed a sample location as well. For understanding of the average impact of area, the adjusted premium analysis is applicable. If area factors are changing, the impact will be included in the distribution of rate increase analysis.

Lowest-Cost Plan Analysis

The analysis of the lowest-cost plans was conducted in a manner similar to the analysis for the most popular plans. The primary difference was in the selection of the plan design. DHCFP asked the carriers to provide the lowest-cost plan offered to each market sector, separate for HMO and PPO plan types, in each calendar quarter during the study period. This quarterly data is used to determine the minimum, median, and maximum value plan in each calendar year. In most cases, the lowest-cost plan is the same across all market sectors for a given carrier. Therefore, the difference in premium is primarily driven by differences in the sample censuses, and differences in rating practices across market sectors. There is, however, one carrier whose lowest-cost plan differed by market sector for a portion of the study period.

Non-Medical Expenses

In 2008, Oliver Wyman produced a report for the Division of Insurance entitled *Analysis of Administrative Expenses for Health Insurance Companies in Massachusetts*. The analysis was performed using published annual financial statements. That analysis has been updated in this report with data through the 2010 annual statutory financial statements of the applicable companies.

For the carrier pricing analysis, carriers provided their pricing retention and components reflected in their April 2010 pricing as a percentage of premium and as a pmpm amount. Some carriers only provided certain components of the retention in one format. In these cases, the reported premiums and membership were used to estimate the other format. In other analyses of non-medical expenses for calendar years 2007 through 2009, the results are based on reported results, and do not necessarily reflect what carriers built into pricing.

Historical Premium Rate Analysis

Carriers provided their annual premiums by market sector for 2007 through 2009. Carriers also provided their rating factors in use in second quarter 2010, as well as member months by age, gender, contract type, area, group size, and industry. Using the annual premiums and aggregate annual member months, DHCFP calculated unadjusted premiums. It is possible that using the second quarter 2010 factors has a slight impact on the resulting premium trends. However, it was determined that it was not feasible to request factors for each quarter. Furthermore, the factors are actually applied based upon effective date of issue or renewal which was not feasible to model in this analysis. It is not anticipated to materially skew the results.

Next, the annual premiums were adjusted by age, gender, area, group size, and benefits. Adjustments were performed by first adjusting the rating factors to make each carrier's factors relative to a common demographic. Age/gender factors were relative to a 45 year old male and area factors were relative to Boston. A weighted average adjusted factor was calculated for each calendar quarter and then for each calendar year. Finally, the unadjusted premiums were divided by the average rating factors to develop expected premiums pmpm, adjusted to the demographics represented by the 1.0 factors.

Note that for this analysis, rating factors applied to mid-size and large groups reflected a premium based on a manual rate and not on the group's own experience. In the market, actual premiums would be based on a combination of the manual rate and an experience rate with the proportion of each depending on the group's size. The largest groups are typically rated based entirely on their own experience. Therefore, this analysis contains the assumption that actual experience will follow the claim pattern assumed in the manual rating factors. Actual premiums may differ. This approach is not anticipated to have a material impact on the results. Rather, it is anticipated that the manual rate would be determined consistent with the overall average experience of the covered groups.

Finally, the individual market was excluded from the adjusted premium analyses. Several carriers did not provide the necessary data to complete the analysis.

Adjusting the premiums for benefits required a separate analysis from the rating factor adjustments. In the mid-size and large group market sectors, carriers generally allow groups to customize their benefit designs. This leads to a volume of unique benefit designs that is not feasible to analyze in the manner that was done for other rating factors. To estimate the average benefit relativities in the small group market, only the benefit relativities in effect as of April 1, 2010 were used for products that represented at least 5 percent of the small group market. These relativities were obtained from data filed with the Division of Insurance. In the mid-size and large group market sectors, for each carrier and each calendar year the ratio of paid claims to allowed claims was calculated based on data provided by the carriers. Oliver Wyman's proprietary pricing model was used to estimate the actuarial value of benefits for a given paid to allowed claims ratio. The unadjusted premiums were divided by the estimated actuarial values to determine the premiums adjusted for benefits. Given the limitations of the data available, this analysis did not include limited network impact in the actuarial value.

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